

**Missouri  
State Board of Health**

# **Task Force II Report on Local Health Services**

**May 1993**

# **Task Force II Report on Local Health Services**

## **Missouri Department of Health**

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May 1993



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March 24, 1993

I wish to express my sincere appreciation to the members of the Local Health Task Force for their tireless efforts in behalf of all Missourians and the State Board of Health for their continuing support during the development of this report.

As we move toward the 21st century, it becomes increasingly obvious that the health of all our citizens depends on the type of public and private cooperation that was so necessary for the successful completion of this project.

This administration is committed to the progressive improvement of Missouri's health service delivery system and looks upon this report as a most positive step.

Very truly yours,

Mel Carnahan



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On behalf of the Missouri State Board of Health, I would like to thank the task force members and the Department of Health staff who worked so hard to complete this health care delivery model.

I believe they have transformed cerebral concept into a published document which will serve to improve the health of all Missourians.

Sincerely,

A handwritten signature in black ink that reads "Elias E. Zirul D.O." with a stylized flourish at the end.

Elias E. Zirul, D.O.  
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## Preface

In May 1981 the State Board of Health created a representative task force from the community of health leaders statewide and charged it with developing model standards for local health departments.

The resulting report of the task force's efforts quickly became a blueprint for local health departments and the then Division of Health in formulating public health activities at the local level. The magnitude and importance of those activities drew the attention of both the legislative and executive branches of government. As a result, legislation was introduced, passed, and on July 29, 1985, signed into law, creating a Department of Health for the State of Missouri.

That report, now known as "Task Force I Report,"<sup>10</sup> correctly defined the local health department as: "The local governmental unit having responsibility to promote preventive health services and to endeavor to assure accessibility of personal health services for all of its citizens within the resources available."

During the last half of the 1980s, winds of change began affecting the nation's public health system. The most significant changes affected personal health care, especially among pregnant women and children, but ultimately for persons in all age groups.

Access to care has become a major policy issue. Public health is particularly concerned with access to preventive and primary care services such as health promotion and education, wellness and illness care, immunizations, nutrition services, mental health and social support services. Barriers to this care involve dimensions related to health care financing, geographic availability of providers, management issues such as hours of operation, acceptability and cultural sensitivity to the population served.

Further complicating these changes is the impact from new demands such as the rapidly expanding AIDS epidemic and the reemergence of old public health problems such as the rise in tuberculosis—a symptom of the erosion in the public health infrastructure.

These factors, along with many others, have created dilemmas for public health not readily apparent only a few years ago. The rapidly increasing demands being placed upon public health agencies, coupled with frustrations relating to lack of funding, weakened infrastructure and lack of a national health policy, have resulted in what the National Academy of Sciences Institute of Medicine (IOM) report refers to as the "disarray of public health, a threat to the health of the public."<sup>4</sup>

Being sensitive to these and other public health issues, the State Board of Health appointed what is now called Board of Health Task Force II. The charge to Task Force II is to revisit the report of Task Force I and, along with issues relevant to today's climate, evaluate needs, concerns, capacity-building and existing shortfalls in addressing public health needs now and for the remainder of this century.

## Introduction

The State Board of Health Task Force II was given the charge to recommend:

1. Minimum standards for core services to be required of local health departments in return for State Cooperative Agreement funding;
2. A local health department evaluation system which would be beneficial to local governing bodies and used as a Department of Health monitoring mechanism; and
3. Legislative authority for such standards and for the funding necessary to implement them.

From the outset, Task Force II was committed to building upon the successful concept formulated in the 1983 report of the State Board of Health Task Force I. At the same time, it was recognized that much has occurred in the past ten years which has altered the course of public health in many areas resulting in a quantum leap on demands for its services.

Task Force II is in agreement with the Institute of Medicine (IOM) report, which states: "In recent years, there has been a growing sense that public health as a profession is a governmental activity and as a commitment of society is neither clearly defined, adequately supported nor fully understood and, as a result, decision-making in public health is most often driven by crises, critical issues and concerns of organized interest groups."<sup>4</sup>

Task Force II recognizes that critical issues, crises and special interest issues will always exist. This report endeavors to provide a framework not only for addressing those factors when they occur, but more importantly, for providing a system which more clearly establishes in Missouri that public health is a recognizable and understandable governmental activity which, by its very presence, stimulates justifiable community support.

Two relatively new national documents, *Healthy People 2000*<sup>6</sup> and *Healthy Communities 2000*,<sup>5</sup> provide considerable information and guidance in reestablishing society's interest in assuring conditions in which people can be healthy. This goal is to be achieved at the state and community levels through forging partnerships which:

1. Develop an understandable set of health status and process objectives that can be readily measured;
2. Develop strategies to achieve those objectives involving public, private and voluntary sectors of society;
3. Develop a coordinating process to help ensure that the community and its health-related services can work together; and

4. Provide local health departments a guidance document to be used in the actual provision and/or assurance of important public health activities.

It is the intent of this Task Force II report that its recommendations be viewed as resting on the four preceding fundamental precepts. Accomplishing this task will require each local health department to critically evaluate and, where necessary, strengthen infrastructure capacity. Of equal importance will be the role of the Department of Health in capacity-building and development for local health agencies. To this end, Task Force II believes the establishment of the Department of Health "public health training institute" for professional development is essential to the success of local health departments in meeting both current and future public health needs of their communities.

In developing this report, it became obvious to task force members that the current Department of Health's Division of Injury Prevention, Head Injury Rehabilitation and Local Health Services must be strengthened in its capacity to support local public health units. To carry out its mission of local support, that division depends upon a network of district offices around the state. Those offices, under provisions of section 199.003(2)(9), RSMo (1986), provide the linchpin function so vital for the day-to-day state assistance, development and coordination of state services in support of local public health departments. The committee feels that district offices must be strong in order to:

- Provide adequate administrative/professional/technical support to local health agencies as necessary for their advancement;
- Provide essential liaison function between local public health departments;
- Provide "on call" support for emergencies and major disease outbreaks;
- Provide an essential advocacy function for area public health departments to the state health department and other geographic areas;
- Provide professional support to local primary care initiatives;
- Provide community development training and support for use by local agencies; and
- Provide basic public health services in areas not served by local public health agencies.

The efforts of the Division of Injury Prevention, Head Injury Rehabilitation and Local Health Services regarding local health will, of necessity, require direct access to the office of the director of the Missouri Department of Health.

In addition to the review of numerous state and federal materials, the task force spent considerable time working with the state demographer in conceptualizing the State of Missouri's population dynamics for the rest of this

decade and on into the 21st century. Through this process, the report was constructed to provide guidance to local health departments to cope with the changing demographics of Missouri's population through this decade.

This report is divided into four major sections:

- Infrastructure
- Personal Health Services
- Communicable Disease Control
- Environmental Health

The sections of Environmental Health and Communicable Disease Control generally are standardized traditional concepts of public health. However, enhancement of these two sections centers around: application of epidemiological principles regarding environmental hazards and toxic agents; investigative techniques; and prevention of emerging new pathogens in communicable disease control.

The major departure from tradition for many local health departments will be found in the section on Personal Health Services. The subcommittee on this section was challenged with the monumental task of developing a guide to essential elements for personal health by life cycle orientation. Those cycles of life and their representative age groupings are as follows: Perinatal containing sub-elements of Maternal Health Services and Neonatal Health Services (birth-27 days); Pediatric containing sub-elements of Postneonatal Health Services (28 days to 1 year), Child Health Services (1-9 years) and Prepuberty Children and Adolescents Services (10-19 years); and Adult containing sub-elements of 20-39 years, 40-64 years, 65-84 years and 85+ years.

The reader is encouraged not to assume that a local health department must provide all these services in order to be recognized as a well-rounded full-service local health agency. Indeed, if the private health care sector is providing recommended services and they are affordable and accessible to all, the local agency need only to coordinate and help assure their continued existence.

However, when a community assessment reveals the need for and willingness to support a local health department in one or more of the life cycle areas, the Personal Health Services section of this report provides important guidance in addressing that need.

It quickly will become obvious that for small and even moderate-sized health departments, implementation of some recommendations of this report is beyond their individual capacity. Concurrently, community assessment may document the need for some of the varied recommendations. In these cases it may be necessary to forge partnerships with other public and private agencies. In fact, the task force encourages local health departments to enter into coalitions and cooperative agreements between local health departments and other agencies. This recommendation should not be viewed as an imposition or infringement on the autonomy of any local health department.

There are already several outstanding examples of such cooperative efforts in the state. These cooperative efforts involve multi-county arrangements for environmental health, sanitation, perinatal, health education and community health nursing services.

Task Force II strongly recommends supplemental state funding to stimulate even more of these ventures and, when possible through mutual county agreements, extend those efforts in consolidation of multi-county services under one administrative department/agency. Finally, this report is structured under the concept of "A Governmental Presence at the Local Level" (AGPALL).<sup>5</sup> AGPALL is derived from the fact that government is the "residual guarantor" of health services independent of the services being provided directly or through community agencies.

AGPALL acknowledges that where health services are concerned, the nearest governmental presence to the community is its local health department. Therefore, it is the intent of this report to provide guidance to the state and local health departments in fulfilling their responsibility of ensuring that health problems and issues are addressed, and when services are needed, to appropriately address those needs within resources available.

This task force report is organized around the Core Functions of Public Health as stated by the Institute of Medicine's Committee for the Study of Public Health in its publication, *Future of Public Health*, National Academy Press, 1988:<sup>4</sup>

**Assessment:**

Assessment, monitoring, and surveillance of local health problems and needs and of resources for dealing with them;

**Policy Development:**

Policy development and leadership that foster local involvement and a sense of ownership, that emphasize local needs, and that advocate equitable distribution of public resources and complementary private activities commensurate with community needs; and

**Assurance:**

Assurance that high-quality services, including personal health services, needed for the protection of public health in the community are available and accessible to all persons; that the community receives proper consideration in the allocation of federal and state as well as local resources for public health; and that the community is informed about how to obtain public health services, including personal health services, or how to comply with public health requirements.

This functional concept will become evident as the reader begins the review with the section dealing with infrastructure.

The intent of this report is to recommend a reasonable process whereby public health efforts are significantly strengthened at both state and community levels.

## Local Health Department Infrastructure

### Introduction

*Healthy Communities 2000: Model Standards* states:

Public Health Infrastructure refers to the basic capacities which a governmental presence at the local level must possess in order to perform the most basic responsibilities to preserve the health of the public in the community. These capabilities represent a basic governmental responsibility to represent and lead the community in assessing health status and needs, to develop public policies and priorities, to preserve health, and to assure that the community is responding appropriately to accomplish this. The community health infrastructure provides a basic problem solving capacity. . . . It includes but is not limited to capacities to provide surveillance, vital statistics, health information and education, epidemiological investigation, public health laboratory analysis, and administration.<sup>5</sup>

The 1988 Institute of Medicine report, *The Future of Public Health*, defines the core functions of public health as assessment, policy development, and assurance. The Centers for Disease Control (CDC) in its recent work on capacity determination and infrastructure<sup>9</sup> summarizes each of these areas as follows:

Assessment is the regular, systematic collection, assembly, analysis, and dissemination of information on the health of the community.

Policy Development is the exercise of the responsibility to serve the public interest in the development of comprehensive public health policies by promoting the use of the scientific knowledge base in decision-making.

Assurance is assurance to constituents that services necessary to achieve agreed-upon goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.

CDC in the same report defined infrastructure as "the capacity required by the governmental representatives of the public health system to effectively carry out the core functions of public health (assessment, policy development, and assurance)."<sup>9</sup>

"The phrase 'local public health department' refers to whatever body is recognized as the official governmental agency representing governmental interest or 'presence' in public health in the community."<sup>7</sup> The governmental presence at the local level is a key concept originally expounded in the original *Model Standards* work in 1979, the predecessor to *Healthy Communities 2000: Model Standards* referred to elsewhere.

However, "Infrastructure is not intended to serve as a complete definition of public health."<sup>5</sup> Alone, it cannot assure conditions in which people can be

healthy. Resources must be based, obviously, on such characteristics as size of the community, current economic status, local, state and federal legislative mandates, budgetary priorities, and the nature of public health priorities developed, for example, under such scenarios as *Healthy Communities 2000* or *Assessment Protocol for Excellence in Public Health (APEX/PH)*.<sup>1</sup> (Adapted from George Pickett, et al., March 7, 1990 draft, "Infrastructure Guide," University of Michigan Project.)

The infrastructure functions for public health, taken together, are the ability, responsibility, and authority:

1. To regularly collect, assemble, analyze, present, and disseminate information regarding factors affecting or potentially affecting the health of the community;
2. To analyze and recommend appropriate policies for the improvement of the health status of the community and its individual members;<sup>7</sup>
3. To implement approved and required actions and programs;<sup>7</sup> and
4. To use the necessary knowledge, skills and support systems to assure that the functions and activities described in this report are available for and accessible to the community.<sup>7</sup>

This chapter on infrastructure attempts to blend or synthesize the various conceptual approaches to infrastructure discussed above into a model which, when satisfied, meets the needs of the other conceptual approaches as well (for example, Michigan, CDC, *Healthy Communities 2000* and *APEX-PH*). However, the criteria-based approach used here takes much from the work of Pickett and others at the University of Michigan, conducted on behalf of the Michigan State Health Department, but adds to and elaborates on that model.

The infrastructure, together with necessary resources, comprise the capacity to serve as the governmental presence in health as envisioned in *Healthy Communities 2000*.

**Definitions:** The final issue is one of definitions. As one reads the literature on public health infrastructure it becomes apparent that the term "infrastructure" is often, if not usually, couched in terms of capacity. In actuality, however, capacity is the expression of the degree or extent to which the required function (or service) can be performed. The function in this case is what service is done, and therefore, (staying true to the original use of the term) the infrastructure is the array of tangible elements needed to perform the function. In the world of public works we would say that the infrastructure, a bridge, for example, has the capacity to support (the function = provide a road over a river) 20 tons on a road over a river. Clearly the capacity is not the infrastructure; it is the measure of the degree to which the infrastructure can perform the function (carry traffic over a river).

In public health the infrastructure is generally considered to be tied closely to a set of "core" functions, and hence, is composed of the tangible resources required to perform those core functions. Thus, the capacity, for example, to do epidemiology requires an individual (or individuals) appropriately trained and equipped. The trained and equipped individuals are the

infrastructure; the function is epidemiology, and the capacity is how much or to what extent can the infrastructure (the trained and equipped individuals) do epidemiology.

At first glance this discussion would seem to dwell overmuch on this issue of definition, but the writing in this area equivocates terminology to such a degree that there is real danger of creating confusion in the mind of the reader. Poorly constructed semantics lead to confusion in logic. The other benefit of carefully defining infrastructure this way is that it brings the discussion back to the tangible elements which can then be defined, enumerated, and priced.

### Criteria

There are a number of criteria appropriate to the consideration of what is included in infrastructure. These criteria frame and define the core infrastructure functions mentioned earlier. They include: A. leadership and health policy formation; B. a statutory base; C. health assessment and response; D. health promotion and protection; E. the management-related functions; F. quality management; and G. information management.

#### A. Leadership and Health Policy Formation

It is expected that, besides the senior public health official of the department, the governing body for the local health department, whether board of health, county board, city council, etc., would be actively engaged in the leadership of the agency at the policy level, including community assessment, priority setting, long-term health planning, and policy formulation.

The agency infrastructure (leadership) is capable of such functions as:

1. Analyzing community health needs and formulating public health policy.
2. Priority setting: Setting priorities for achieving better community health. The agency should be able to list and describe its priority objectives and programs, relate them to any statutory basis and describe the extent to which the objective has been obtained.
3. Planning: The formulation of alternatives and setting objectives and strategies for actions.
4. Resource assessment: Allocating needed resources according to priorities expressed in the implementation plan.
5. Analyzing public policy issues affecting public health, advocating changes in public policy to correct public health problems, and facilitating the formulation of public policy conducive to community health.
6. Community involvement: Involving the community throughout the process, both through the official elected governance process and through other community involvement processes.
7. Policy analysis.

8. Assuring cultural sensitivity within the agency.
9. Possession of knowledge of basic health sciences.
10. Political analysis: To assess and understand the political forces and interpersonal factors. Political analysis is the study and evaluation of all the political forces and/or interpersonal factors which bear on the issue.

The infrastructure required for this functional capacity is an individual or individuals trained sufficiently to be able to perform or knowledgeably oversee the foregoing functions. It is the task force's belief that this at least requires an individual trained at the postgraduate level in those areas. An individual with a Masters in Public Health (MPH) or an equivalent degree would meet that criteria but it may also be possible to meet the criteria through a series of special courses such as would be offered by the training institute to college graduate-level individuals.

#### B. Statutory Basis

The statutory basis for public health programs and activities is that collection of laws and administrative rules which both permits and requires certain activities to protect and promote the health of the public.<sup>7</sup>

The infrastructure required is an up-to-date health code, including current state statutes, local ordinances, and administrative rules and regulations promulgated pursuant to these laws.

#### C. Assessment

The health department should maintain an ongoing system for monitoring and analyzing community health status, services, and threats or risks to health, including those occurring in the environment.

Infrastructure functions required:

1. Epidemiology capacity to assure that outbreaks or other community health problems at unacceptable levels can be investigated by appropriately trained people.
  - a. Analytical capability
  - b. Necessary staff or availability of staff
2. Laboratory capacity available

The general policy recommended by the task force is as follows: As the technology becomes available, the local health department should develop the capacity to perform on-site screening for toxic chemicals and serious microbiological contaminants.

The task force believes that laboratory screening technology will continue to improve so that an increasing number of clinical and environmental tests could be performed by nonlaboratory trained individuals in the field and produce reliable results not subject to interpretation requiring laboratory training.

- a. Microbiological—perform approved screening tests  
(There may also be a limited number of "basic" microbiological examinations not classed as screens which are within the capability of a basic local health department, but Clinical Laboratory Improvement Act (CLIA) regulations may preclude doing that without personnel possessing credentials beyond the reach of the basic local health department.)
- b. Clinical—perform approved screening tests
- c. Environmental—perform approved screening tests

### 3. Data (see also H. Information Systems)

#### Types or categories of information:

- a. Outcome
  - 1) Mortality for the jurisdiction
  - 2) Morbidity for the jurisdiction
    - i) Reportable diseases and injuries
    - ii) Survey/sampling information
    - iii) Surveillance information
- b. Risk factors (By way of definition these fall into two categories, human risks are those present in a person, his/her behavior, or the result of exposures to that person; environmental risks are those located in the environment.)
- c. Demographics of the jurisdiction
- d. Client information
- e. Process or activity data for agency activities
- f. Resources expended data (financial and personnel)
- g. Community health resources (health care) available
- h. Community information
- i. Organizational functional information
  - 1) Personnel
  - 2) Purchasing
  - 3) Minutes of meetings, etc.
  - 4) Policies and procedures
  - 5) Quality assessment and management data. QA information is composed of those indicators that tell an organization whether it is achieving its intended objectives in "product" quality, customer satisfaction, and items requisite for the production of services such as laboratory results.
- j. Professional information (medical library, professional literature, National Library of Medicine and other data bases available).

4. Statistical support (data analysis and preparation for presentation)
  - a. Availability of an individual with the competence to evaluate data (basic biostatistics) and prepare data for presentation (measures of central tendency, regression, correlation and basic binomial statistics).
  - b. Staff trained to a level appropriate for the use of the data at the local level, for example, for communicating the information to the community, press, etc.

The infrastructure components required for these functional capacities are:

1. An individual or individuals trained sufficiently to be able to perform or knowledgeably oversee the foregoing functions. At the minimum it is expected that this would be an individual with a relevant college degree and any necessary additional training. It is also possible that some or all of these functions could be performed or knowledgeably overseen by the same individual responsible for the leadership functions, depending on the demands of the office.
2. The necessary laboratory and sampling equipment.
3. The necessary computer equipment and statistical and data base software to manage data and its analysis (see H. Information Systems).

#### **D. Health Promotion and Protection**

The health department should inform and assist the community in appropriate actions necessary to promote health and prevent disease and injury.

The infrastructure functional capacities required are:

1. Community education

Community-wide strategies for health promotion and support for public health programs (including encouraging community "engagement" and leveraging the community's resources). Examples include:

  - a. Periodic needs assessment, such as use of the Behavioral Risk Factor Survey
  - b. Community-wide risk factor reduction educational strategies
  - c. Dissemination of information about health department programs and services (training material, etc.)
  - d. Dissemination of information to citizens about programs available in the community
2. Support services to the other programs of the local health department
  - a. Needs assessment of educational components
  - b. Orientation for new employees
  - c. In-service training for employees

- d. Recruitment, development and coordination of volunteers
- e. Training in patient education/counseling
- 3. School health (a basic understanding of the role of school nursing, health curricula and student health promotion)
- 4. Community programs. Ongoing programs designed to inform leaders and high-risk groups in the community about personal health risks and environmental hazards with appropriate actions to reduce their impact.
- 5. Community involvement and leadership
  - a. Building coalitions as needed
  - b. Maintaining linkages with community organizations
  - c. Acting as a resource to community agencies

The infrastructure required for this functional capacity is an individual or individuals trained sufficiently to be able to perform or knowledgeably oversee the foregoing functions. At the minimum it is expected that this would be an individual with a relevant college degree and any necessary additional training.

#### E. Management

Infrastructure functional capacities required are:

- 1. Statutory compliance monitoring and assurance
- 2. Management systems
  - a. Planning
  - b. Personnel systems, including staff training
  - c. Financial systems
  - d. Management information system
    - 1) Systems designed to feed back to management the functioning and progress of the department (see H. Information Systems)
    - 2) The provision of the professional information requisite to the up-to-date, knowledgeable functioning of the department, its policy making, and its services
- 3. Resource allocation and management
  - a. Budgeting and purchasing
  - b. Inventory control
  - c. Preventive maintenance
- 4. Legal support
- 5. Personal attributes and skills required for effective management
  - a. Team leadership

- b. Financial management
- c. Human resources management
- d. Program planning and administration
- e. Organizational management

The infrastructure required for these functional capacities is an individual or individuals trained sufficiently to be able to perform or knowledgeably oversee the foregoing functions. At the minimum it is expected that this would be an individual with a relevant college degree.

#### F. Evaluation and Quality Management

The infrastructure functional capacities required are:

1. Evaluation. Evaluation is generally regarded as the function of determining the effectiveness of departmental activities (their effect on the targeted population in terms of stated goals and objectives). Efficiency may also be included within the general terminology of evaluation (the ratio of the cost to service unit).
2. Quality management. Quality management here is used to incorporate those concepts included in Total Quality Management (TQM), (total, enterprise-wide or system-wide assessment and management of quality) and Continuous Quality Improvement (CQI), (continuously searching for means to always be improving what is done by the agency). Both TQM and CQI stress such concepts as the importance of top management leadership, "customer" focus (both internal and external), participatory problem solving, thoughtful analysis of indicators, training, and a system-wide viewpoint.

The infrastructure required for this functional capacity is an individual or individuals trained sufficiently to be able to perform or knowledgeably oversee the foregoing functions. At the minimum it is expected that this would be an individual with a relevant college degree and any necessary additional training. These functions could be performed or knowledgeably overseen by the same individual responsible for the leadership and management functions, depending on the demands of the office.

#### G. Facilities, Furnishings and Equipment (FFE)

Facilities, furnishings and equipment must be sufficient to assure adequate capacity to conduct not only the infrastructure functions, but also the programmatic functions of the local health department. Replacement of FFE must also be included in the long-range financial planning of the department.

#### H. Information Systems which support surveillance, assessment, policy and management.

In general, in terms of information management, the department should strive to:

Capture, store, retrieve, and then transform data in such a way that it becomes information, then knowledge, then understanding (insight sufficient to provide a basis for informed, purposeful action) on an enter-

prise-wide basis. The local health department generates data and information for both its own internal use and the use of others. Through the provision of data-based information, it plays (or should play) a leadership role in the community providing information, knowledge and insight into health problems and solutions.

Information system principles include:\*

1. Information systems should be integrated—"integrated behavior is made possible by integrated information";
2. Information must move easily;
3. It must be capable of being pulled, not pushed;
4. It must be generally computerized (sized to fit the department);
5. Mechanisms must exist for pooling information and learning at levels of aggregation not now customary; and
6. The way to present and display data must be improved.

(\* From Donald Berwick, "Seeking Systemness," *HealthCare Forum*, March-April, 1992.)

Therefore, infrastructure components include:

1. Hardware and software sized to fit the department;
2. Hardware capable of "doing it all" at one type of workstation, including graphics, Geographic Informational System/mapping (in the future), as well as the "usual" personal computer and terminal emulation functions;
3. Communications capability including local integrated interdevice communication (networking), modem capability, and a method providing transparency of data to all users (file server or open system);
4. Capability to communicate with and to upload and download data to and from other computers, including but not limited to the Missouri DOH information system;
5. Software capable of serving, in an integrated manner, virtually all the information needs of the department (when automation is feasible, the department should automate);
6. Software that is easily learned and similar from application to application; and
7. Readily available training and support.

The Infrastructure Table on the next page helps to explain and clarify the relationships between: 1. Infrastructure criteria and selected key functional capacities and 2. The infrastructure resources needed for each of those criteria and functional capacities shown in the table. Since several of the infrastructure functional capacities can be combined into a minimum number of appropriately trained individuals, the duplication in the resources related to those individuals could be combined where appropriate.

**Infrastructure Table**  
**Resources by Criteria or Key (Core) Functional Capacities**

Infrastructure Elements	Criteria or Core Functional capacities					
	Leadership	Statutes & Regulations	Laboratory	Statistical Support	Management	Legal
<b>People</b>	The public health director of any LHD must be trained and competent in public health leadership; the gov. bd. must play an active, knowledgeable role	The public health director must be familiar with & have at hand adequate statutes & regs.	The LHD must possess an individual trained in the taking and shipping of samples and in the use of field and clinical screening technologies	The LHD must possess an individual trained in basic statistics and in presenting and explaining data-based information	The LHD must possess an individual trained in management science, administration, and basic financial management	The LHD must have ready access to legal services
<b>Equipment</b>	Office	Relevant state statutes & rules; rel. local laws & regulations	Office + basic lab equipment required to meet screening test recommendation	Computing	Office, incl. computing	
<b>Fixtures</b>	Office		Office	Office	Office	
<b>Furniture</b>	Office	Shelving	Office & workspace for lab equip. & storage	Office	Office	
<b>Supplies &amp; Software</b>	Office		Lab supplies & record software	Database & statistical software	Business software, incl. financial, database, spreadsheet, wp, inventory, etc.	
<b>Agreements &amp; Contracts (services)</b>	Present		Arrangement(s) for lab support		Office equipment maintenance	Arrangements for legal support

Infrastructure Elements	Criteria or Core Functional Capacities					
	Training	Data	Health Ed.	Epidemiology	Information Systems	Evaluation & Quality Mgmt
<b>People</b>	The LHD must have access to individuals with competencies in public health training	The LHD must possess an individual(s) sufficiently knowledgeable in the required data and its proper use and meaning to meet the basic data needs of the jurisdiction	The LHD must possess an individual trained in Health education	The LHD must possess an individual trained in basic epidemiology	The LHD must possess an individual(s) trained sufficiently in the use of the computer to use the software and who understands the nec. info principles to manage the information	The LHD must possess an individual schooled in the basic principles of evaluation and quality management
<b>Equipment</b>	Office & necessary training aids (could be shared w/ health ed)	Office + computing	Office + presentation equipment	Office + computing	Sufficient devices, computing power & commo capability to meet requirements	Office
<b>Fixtures</b>	Office	Office	Office	Office	Office	Office
<b>Furniture</b>	Office + access to space used for training	Office	Office	Office	Office	Office
<b>Supplies &amp; Software</b>	Office + necessary training supplies & software	Office & the necessary software to easily capture, store and retrieve the necessary data & a smooth interface with the State	Office + presentation and educational material	Statistical & epidemiological	Operating system which is user friendly (windowing) w/ seamlessness between applications & the requisite information mgmnt applications	Office & statistical
<b>Agreements &amp; Contracts (Services)</b>	Agreement(s) for assistance		Agreement for consultation	Agreement for support & consultation	Agreements for support and training	Agreement for support, consultation, & training



## Personal Health Services

### Introduction

Individuals and families form the communities, cities, counties, and state served by the local health department, the state health department and its district offices. In this context, it is essential to assess and to develop programs for both the individual and the aggregate. Further it is accepted that care of the indigent population by the local and state health departments is essential until other programs of universal access to health care are developed by state or federal government to care for these unmet needs (Institute of Medicine: *The Future of Public Health*, 1988).<sup>4</sup>

The standards for personal health services were developed on the premise that certain public health activities be supported by the state health department at the local level. These include:

- Conduct a community assessment by a broad-based community group of citizens, organizations and health care providers
- Establish resources as well as needs
- Establish priorities and a plan/program
- Implement a plan/program of services
- Evaluate outcomes

It is also recognized that each community will utilize *Healthy People 2000*<sup>6</sup> and *Healthy Communities 2000: Model Standards*<sup>5</sup> as guides in the process.

### Primary Health Care

#### A. Definition

The practice of primary health care brings together public health preventive services and therapeutic care, including rehabilitation. The focus for planning and delivering health care should be on the individual and the family, as well as on defined population groups. The knowledge of epidemiology, biostatistics, social science, behavioral science, medical care, health administration, and community/public health must be employed.

The task force accepts the World Health Organization's description of primary health care, which states:<sup>8</sup>

Primary health care is essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their free participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system, of which it is the nucleus, and of the overall social and economic development of the community.

Primary health care should be the antecedent to all other levels of care and should serve as the entry into the health care system. Primary health care and other segments of the health care system should be mutually supportive and interdependent in terms of resources and referral mechanisms, with arrangements for linkages which aim to provide people with appropriate care and return people to primary levels of health care as soon as it is feasible. Primary health care should be continuous and should serve as a base from which other levels of care and support can be coordinated.

#### B. Primary Health Care Team

Primary health care can take place in a variety of settings such as a local health department, neighborhood health centers, private physicians' and dentists' offices, schools, the workplace, homes, and other community settings. Services should be near the people to be served and the means of accessing care should be available. The health team should serve a well-defined population to ensure responsive and reciprocal, caring relationships.

Primary health care teams ideally should be comprised of physicians, dentists, nurse practitioners, dental hygienists, community health nurses, social workers, community outreach workers, health educators and nutritionists. Other disciplines appropriate to job responsibility should be accessible to the primary health care team for consultation. Team members will have knowledge of and skills in community organization, epidemiology, community health, leadership, and interpersonal relationships.

#### C. Primary Health Care Services

Primary health care should be addressed from a holistic perspective, bringing together preventive and therapeutic services, and it should address the needs of individuals, families and community. This systematic approach is known as Community-Oriented Primary Care,<sup>2</sup> which requires community participation to identify and address the major health problems of the community. This approach is summarized as follows:

1. Definition and characterization of the community
2. Identification of the community's health problems
3. Implementation of programs in response to community needs
4. Monitoring the impact of programs

Individual and family primary health care shall include:

1. Health promotion and prevention of illness through periodicity schedules

2. Access to wellness and medical care, laboratory and pharmacy services
3. Service coordination for at-risk individuals and families
4. Health education and disease prevention
5. Control of injurious environmental factors
6. Immunizations
7. Communicable disease surveillance and intervention
8. Dental health services
9. Mental health services
10. Nutrition services
11. Social support systems
12. Home visiting

In order to provide clarity for those general categories of services which the local and state health departments are to assure, the following descriptions are provided:

1. Health Promotion and Prevention of Illness Through Periodicity Schedules

Many scientific groups have determined schedules for the recommended timing of health interventions which should be applied to the general, well population. These are intended to prevent illness, to detect early illness when the benefits outweigh the risks and costs, and to facilitate future health care. In Appendix A is a currently recommended periodicity schedule for all age groups, referenced as to sources. Because medical advances will alter the suggested use of these preventive screenings, health departments will need to reassess this body of knowledge regularly.

2. Access to Wellness and Medical Care, Laboratory and Pharmacy Services

As indicated by the periodicity schedules, access to preventive primary health care includes access to a primary care provider for comprehensive exams, as well as access to specific, well-timed laboratory and radiologic testing and pharmaceutical interventions. In addition to this wellness care, all persons must have access to a health care system in which they will be cared for in times of illness or emergency. Each person should have a "health care home" where all medical records would be housed by their primary care provider. The provider would receive communication

regarding all preventive or treatment interventions applied to that patient allowing for continuity of care for that patient and family.

**3. Service Coordination for At-Risk Individuals and Families**

To assure continuous and comprehensive health care, at-risk individuals and their families require service coordination. Service coordination provides the individual/family, service providers, and community resources an integrated, family-oriented plan of service. Based on the individual/family's needs, the local health department may be identified as the lead agency and provide this service coordination. Under other circumstances, it may be more appropriate for the local health department to participate as a team member with other health providers in the development of a service plan establishing agency responsibilities and identifying the appropriate agency to provide the service coordination.

**4. Health Education and Disease Prevention**

Because the success of any health care system in improving the health of a population depends on the motivation of members of that population to utilize needed services, health education must be an integral, basic and ongoing component of comprehensive care. This should be coordinated by local health education advisory groups and should include a comprehensive school health education program from preschool through grade twelve, as well as community health education efforts. Equally important is the health education approach to the community to tackle problems such as drinking and driving, drug abuse, AIDS, and tobacco. Local health departments should lead and support these activities, and should provide health education training and material to all age groups.

**5. Control of Injurious Environmental Factors**

Environmental health services which affect personal health involve promoting the quality of life by understanding, modifying or controlling those physical, biological and chemical factors in the environment that pose a health hazard, interfere with performance of daily activities, or detract from the comfort and enjoyment of life. To do this, identifiable health hazards must be monitored, community understanding promoted, and an environmental health plan and policy.

**6. Immunizations**

All persons shall receive information and counseling on the immunizations appropriate for their age, sex and gender. (Refer to Communicable Disease section, Objective 3.)

## 7. Communicable Disease Surveillance and Intervention

Disease surveillance and appropriate intervention measures shall be implemented for the prevention and control of communicable diseases. (Refer to Communicable Disease section.)

## 8. Dental Health Services

The goal of dental health is that all persons shall have optimum oral health and assurance of restorative care. A comprehensive program for children should include counseling parents on appropriate care of gums and teeth, fluoride supplements for children at risk, and routine visits every six months starting at age three. Adults need to be educated on the importance of routine checkups every six months, oral hygiene routines, and the prevention of periodontal disease and dental caries. Referral sources for care should also be available.

## 9. Mental Health Services

Mental health services must follow the trend away from large institutions to community-based services, in the belief that mental health problems are related to a family and community context, not merely the individual. The many mental health problems all communities and all strata of people face include substance abuse, homelessness, family violence, disorganized families, abuse (emotional, physical, sexual) and depression, and have behavioral beginnings which could be attacked by primary mental health care. It is essential that mental health services are available to individuals and families.

## 10. Nutrition Services

All people should be given the opportunity of health education to reinforce and to expand their knowledge of nutrition. It is essential that people with poor nutrition are assured access to select safe, appropriate food from available food sources in the community. They should have access to nutritional assessment, prescription and counseling. It is well documented that poor nutrition is a direct contributory cause to poor health status in all life cycles signaling the need to teach children good nutritional choices in school.

## 11. Social Support Systems

The health department needs to develop and sustain productive interaction with services and agencies which focus on safe and adequate housing, income maintenance, employment and job training, transportation, adult and child day care, respite care, and with other kinds of voluntary support groups. *The Future of Public*

*Health* calls for " ...close working relationships with social agencies in order to act as effective advocates for, and to cooperate with, social agency provision of social services that have an impact on health."<sup>4</sup>

## 12. Home Visiting

Home visiting services traditionally have been provided by the public health nurse but must be expanded to include persons such as outreach workers, social workers, nutritionists, environmental specialists, physicians, nurse practitioners, and the home health/hospice team. The home is frequently the setting where health teaching is best provided; where environmental assessments can uncover injurious factors; where family and home assessments contribute essentially to a health care plan; and where the health status of family members can be maintained or improved by the presence of health team members. Maintaining people in their homes through the aging process, during chronic disease or disabling conditions, and during crisis situations is an important service.

## Conclusion

In drawing on the report of the Institute of Medicine, *The Future of Public Health*,<sup>4</sup> it is clear that personal health standards and their philosophical base must be part of the mission of the state health department and each local health department. Community health assessments from each county or multicounty health department must contribute to an essential state health assessment in order that priorities, programs, and policies be developed which carry a unifying theme between the state and local area. Finally in the words of the Institute of Medicine report:

Government has an inherent responsibility to take positive action to achieve goals that society agrees upon in the interest of individual justice or for the common good.

The committee recommends that public health agencies assure their constituents that services necessary to achieve agreed upon goals are provided, either by encouraging action by other entities (private or public sector), by requiring such action through regulation, or by providing services directly.

## Elements for Personal Health by Life Cycle

The following pages contain the elements by life cycle for personal health services. As an aid to local health departments in providing these services, several resources and/or worksheets are available through the Department of Health, district offices, as well as other state agencies (such as the Department of Social Services or Department of Mental Health) that substantially reflect the views of the task force in providing the services listed in the elements.

I. Perinatal: Contains the sub-elements of maternal health and neonatal health services.

Goals: Each community will have adequate public health, medical, educational, social and other support systems to assure basic comprehensive maternal and infant health services for all women and their infants.

The local health department assures that each pregnant woman will have access to the health care system and assures the coordination of required services. For those clients who have marginal or no resources, the local health department will assure that resources are allocated for care or will provide the care.

The local health department will give leadership to the community's formulation of maternal and neonatal health objectives in relation to health promotion, health protection, preventive services, and special population objectives (*Healthy People 2000*).<sup>6</sup>

A. Maternal Health Services

1. Outreach and case-finding services which assure:

- a. Public awareness of the necessity and the availability of prenatal services.
- b. Free pregnancy testing with immediate counseling regarding test results and access to needed services.
- c. Early identification of high-risk factors in the pregnancy.
- d. Determination of financial and social resources.
- e. Referral to comprehensive prenatal services.

2. Provision of maternal health services which assures:

- a. Entry into medical prenatal care within four weeks of a positive pregnancy determination.
- b. Initial and continuous comprehensive risk assessment to include medical, nursing, dental, psychosocial, nutritional, environmental and behavior factors completed in the health care setting, the home, or other pertinent site.
- c. Prenatal and intrapartum care appropriate to medical risk factors.
- d. Individual health care plans developed by the client and service/care coordinator, which are implemented by appropriate health team members in the health care setting, the home, or other pertinent site.
- e. Comprehensive health education which promotes healthy behaviors and general knowledge of pregnancy and parent-

- ing, and which provides information on proposed care and patients' rights.
  - f. Geographically accessible site for delivery.
  - g. Provision of postpartum care and family planning services including inter-conceptual counseling.
3. Linkage and referral services which assure:
- a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Resources to meet needs identified in the health care plan.
  - d. Availability of maternal transport systems.
  - e. Identification of the primary care provider to assume care of the mother after the postpartum visit.
  - f. Identification of the primary care provider for the infant prior to delivery.
  - g. Confidentiality, maintenance, and timely transfer of patient records among providers.

B. Neonatal Health Services (birth through 27 days)

1. Outreach and case-finding services which assure:
- a. Public awareness of the necessity and the availability of health care services for the neonatal infant.
  - b. A system which will identify infants with medical and social high-risk factors including the systematic review of birth certificates.
  - c. Determination of social and financial resources.
  - d. First health care appointment according to periodicity schedule (Appendix A).
2. Provision of neonatal services which assures:
- a. Entry into health care which includes health supervision, health education and medical care.
  - b. Initial and continuous comprehensive risk assessment to include medical, nursing, psychosocial, nutritional and environmental factors completed in the health care setting, the home, or other pertinent site.
  - c. Individual health care plans developed by parents and service/care coordinator, which are implemented by appropriate health team members in the health care setting, the home, or other pertinent site.
  - d. A neonatal transport and referral system which takes into account the infant's level of medical risk.

- e. Comprehensive health education which promotes healthy development for the infant and increases parenting skills of the family/caregivers.

3. Linkage and referral services which assure:

- a. Neonatal primary health care.
- b. Access to high-risk inpatient and outpatient care.
- c. Resources to meet needs identified in the health care plan.
- d. Availability of safe transport for neonatal care.
- e. Professional education to inform providers of available community services.
- f. Confidentiality, maintenance and timely transfer of patient records among providers.

II. Pediatric: Contains the subelements of postneonatal health services, child health services, and prepuberty children and adolescents services.

Goals: Each community will have adequate public health, medical, educational, social, and other support systems to assure basic comprehensive child health services.

The local health department assures that each child will have access to the health care system and assures the coordination of required services. For those clients who have marginal or no resources, the local health department will assure that resources are allocated for care or will provide the care.

Local health departments will give leadership to age-related objectives in health promotion, health protection, preventive services, and special populations as defined in *Healthy People 2000*.

The local health department in concert with the local school district and the local school health advisory team will develop a comprehensive school health program.

A. Postneonatal Health Services (28 days up to 1 year):

1. Outreach and case-finding which assure:

- a. Public awareness of the necessity and availability of infant and ongoing child health care services.
- b. Integrated and coordinated system of transitional care between obstetrical and child health services with referral to comprehensive primary care.
- c. A system which identifies:

- 1) High-risk conditions of infants and mothers
  - 2) First-time parents for enrollment in parenting programs
  - 3) Special problems reported on the birth certificate and reported infant death
  - 4) Factors or conditions which trigger case management for the infant and/or family.
  - d. Determination of financial and social resources.
  - e. Assist the community assessment group to identify the leading causes of childhood morbidity and mortality.
2. Provision of postneonatal health services which assures:
- a. Entry into primary care within four weeks of delivery.
  - b. Well-child care consistent with periodicity schedule and parental counseling assessments to include:
    - 1) Developmental
    - 2) Nutritional
    - 3) Physical examination and immunizations
    - 4) Laboratory screening
    - 5) Dental screening
    - 6) Vision and hearing screening
  - 7) Psychosocial assessment with special attention to high-risk situations such as abuse, neglect, substance use and poverty
  - 8) Screening for exposure to environmental health hazards common in the community such as lead absorption, pesticides, parasitic infestation, contaminated water, ultra-violet light, second-hand smoke and noise
  - 9) Parent education for normal growth and development, nutrition, family life, preventive health care, injury prevention, physical activity
  - c. Individual health care plans developed by parents and health care team, implemented by appropriate team member(s) in concert with the infant's caregiver in the health care setting, the home, or other pertinent site.
  - d. Access to specialized care according to identified needs (secondary or tertiary outpatient or inpatient treatment) including home care services.
  - e. Comprehensive health education which promotes healthy development for the infant and increases parenting skills of the family/caregivers.

3. Linkage and referral services which assure:
  - a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Identification of resources to meet needs identified in the health care plan.
  - d. Identification of primary care provider(s).
  - e. Professional leadership to assist the community assessment group establish age-related objectives.
  - f. Confidentiality, maintenance, and timely transfers of patients' records among providers.
  - g. Identification of support groups to assist families with special health/psychosocial problems.

**B. Child Health Services (1-9 years):**

1. Outreach and case-finding which assures:
  - a. Public awareness of the necessity and availability of continuous comprehensive child health services.
  - b. Targeting of hard-to-reach, high-risk population segments such as run-aways, homeless, males, parenting teens and minorities.
  - c. Assistance to the community assessment group in identifying the leading local causes of childhood morbidity and mortality.
  - d. Identification of and coordination with other local child health services and programs such as preschool education and nutrition programs.
  - e. Determination of social and financial resources.
  - f. Referral to comprehensive primary health care services.
2. Provision of child health services which assures:
  - a. Entry into primary care including preventive and restorative dental care.
  - b. Well-child care consistent with periodicity schedule and parental counseling/assessments to include:
    - 1) Developmental
    - 2) Nutritional
    - 3) Physical examination and immunizations
    - 4) Laboratory screening
    - 5) Dental screening
    - 6) Vision and hearing screening

- 7) Psychosocial assessment with special attention to high-risk family/household situations such as child abuse, neglect, family substance abuse, and poverty
  - 8) History of exposure to environmental health hazards common in the community including but not limited to lead absorption, pesticides, parasitic infestation, contaminated water, ultraviolet light, second-hand smoke and noise
  - 9) Comprehensive parent education for normal growth and development, nutrition, family life, preventive health care, injury prevention and physical activity
  - c. Individual and family health care plans for those children selected for case coordination which are implemented by the appropriate team member in the health care setting, the home, the school, or other pertinent site.
  - d. Comprehensive health education which promotes healthy development for the child and which increases parenting skills of the family.
  - e. Geographically accessible site(s) for primary health care.
3. Linkage and referral services which assure:
    - a. Assistance with transportation needs.
    - b. Professional education to inform providers of available community services.
    - c. Identification of resources to meet needs identified in the health care plan.
    - d. Identification of primary care provider(s).
    - e. Professional leadership to assist the community assessment group establish age-related objectives.
    - f. Confidentiality, maintenance, and timely transfers of patients' records among providers.
    - g. Identification of support groups to assist families with special problems.

C. Prepuberty Children and Adolescents Services (10-19 years)

1. Outreach and case-finding which assure:
  - a. Public awareness of the necessity and availability of continuous comprehensive youth health services.
  - b. Targeting of hard-to-reach, high-risk population segments such as run-aways, homeless, males, parenting teens and minorities.
  - c. Assistance to the community assessment group in identifying observable high-risk behaviors which lead to preventable mortality and morbidity.

- d. Identification of and coordination with other local health, social and mental health services and programs.
  - e. Determination of social and financial resources.
  - f. Referral to comprehensive primary health care services.
  - g. Free pregnancy testing with immediate professional-to-client counseling regarding test result and access to needed services.
2. Provision of youth health services which assures:
- a. Entry into primary care.
  - b. Preventive health care consistent with periodicity schedule. Adolescent services should be a continuum of pediatric care. Health providers will also have to apply many principles of adult medicine and must be particularly sensitive to the needs of the youth and adolescent for individuality and confidentiality. Assessments to include:
    - 1) History, physical examinations, developmental assessments, laboratory tests, and assessment of dental status and enrollment in preventive and restorative dental services.
    - 2) Nutrition assessment with counseling and referral to food assistance programs where appropriate.
    - 3) Patient education and counseling covering normal maturation, nutrition, physical activity, injury prevention, preventive health care, school and peer adjustment, family relationships, personal values clarification, sexuality and substance abuse (alcohol, tobacco, and drugs).
    - 4) Psychosocial needs assessment with referral to social and mental health services where appropriate.
    - 5) Family planning information and services.
    - 6) Sexually transmitted diseases (STD) information, screening, and treatment or referral for treatment.
    - 7) Documentation of completion of immunization schedule.
    - 8) History of exposure to environmental health hazards common in the community including but not limited to lead absorption, pesticides, parasitic infestation, contaminated water, ultraviolet light, second-hand smoke and noise.
    - 9) Lifestyle assessment with special attention to high-risk behaviors which lead to injury risks, violence, substance abuse (tobacco, alcohol and drugs), pregnancy, poor nutritional state, STD, AIDS, suicides and chronic disabling conditions.
  - c. Individual and family health care plans for those youth selected for case coordination which are implemented by the appropriate team member in the health care setting, the home, the school, or other pertinent site.

- d. Comprehensive health education which promotes healthy lifestyles for youth and which increases parenting skills for both youths and families.
  - e. Geographically accessible site(s) for primary health care.
3. Linkage and referral services which assure:
- a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Identification of resources to meet needs identified in the health care plan.
  - d. Education and training of the adolescent as a health care consumer highlighting both rights and responsibilities of the individual for personal health care.
  - e. Identification of primary care provider(s).
  - f. Professional leadership to assist the community assessment group establish age-related objectives.
  - g. Confidentiality, maintenance, and timely transfers of patients' records among providers.
  - h. Identification of support groups to assist adolescents and families with special problems.

III. Adult: Contains subelements of:

- Adult Services (20-39 years)
- Adult Services (40-64 years)
- Adult Services (65-84 years)
- Adult Services (85+ years)

Goals: Each community shall have adequate public health, medical, educational, social, and other support systems to assure basic comprehensive preventive and primary health care services for adults.

The local health department assures that each adult will have access to the health care system and assures the coordination of required services. For those clients who have inadequate or no resources, the local health department will assure that resources are identified for care or will provide the care.

The local health department will give leadership to the community's formulation of adult health objectives in relation to health promotion, health protection, preventive services and special population objectives (*Healthy People 2000*), and in the creation of an environment that facilitates and supports healthful behavior.

Recognizing the unique ability of adults to make lifestyle choices which significantly impact health, programs of local

health departments will emphasize the individual's responsibility for injury prevention and positive health-related behaviors.

The local health department will be one of the community force's support of the elderly at their highest level of functioning and in the least restrictive living environment.

#### A. Adult Services (20-39 years)

##### 1. Outreach and case-finding which assures:

- a. Public awareness of the necessity and availability of continuous comprehensive adult health services, even in low-risk, healthy young adults.
- b. Targeting hard-to-reach, high-risk population segments such as homeless, migrants, males and minorities.
- c. Assistance to the community assessment group in identifying observable high-risk behaviors which lead to preventable mortality and morbidity.
- d. Identification of and coordination with other local health, social and mental health services and programs.
- e. Determination of social and financial resources:
- f. Enrollment in comprehensive primary health care services.
- g. Free pregnancy testing with immediate professional-to-client counseling regarding test result and access to needed services.

##### 2. Provision of young adult health services which assures:

- a. Entry into or continuation of primary care.
- b. Preventive health care consistent with periodicity schedule.
  - 1) History, physical examinations, developmental assessments, laboratory tests, and assessment of dental status and enrollment in preventive and restorative dental services.
  - 2) Nutrition assessment with diet modification, counseling, referral to food assistance programs where appropriate (food stamps; Women, Infant and Children (WIC); food pantries).
  - 3) Patient education and anticipatory guidance covering normal maturation, nutrition, injury prevention, violent and abuse behavior, suicides, sexual behaviors, physical activity and leisure time, and other age-appropriate preventive information.
  - 4) Psychosocial needs assessment with referral to social and mental health services where appropriate.
  - 5) Family planning information and services.
  - 6) STD information, screening and treatment or referral for treatment.

- 7) Documentation and completion of immunization schedule.
  - 8) History of exposure to environmental health hazards common in the workplace and the community, including but not limited to ultraviolet light, pesticides, chemical toxins, second-hand smoke, noise.
  - 9) Lifestyle assessment with special attention on high-risk behaviors which lead to injury risks, violence, substance abuse (tobacco, alcohol and drugs), pregnancy, poor nutritional state, STD, AIDS, suicides and chronic disabling conditions.
- c. Individual health care plans implemented by the appropriate team member in the health care setting, the home or other pertinent site.
  - d. Comprehensive health education which promotes healthy lifestyles for individuals and parenting skills for families.
  - e. Geographically accessible site(s) for primary health care.
3. Linkage and referral services which assure:
- a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Identification of resources to meet needs identified in the health care plan.
  - d. Education and training of the young adult as a health care consumer highlighting both rights and responsibilities of the individual to take appropriate responsibility for his/her health care.
  - e. Identification of primary care provider(s).
  - f. Professional leadership to assist the community assessment group establish age-related objectives.
  - g. Confidentiality, maintenance, and timely transfers of patients' records among providers.
  - h. Identification of support groups to assist young adults and families with special problems.

**B. Adult Services (40-64 years)**

1. Outreach and case-finding which assures:
  - a. Public awareness of the necessity and availability of continuous comprehensive adult health services.
  - b. Targeting hard-to-reach, high-risk population segments such as migrants, homeless, minorities and males.
  - c. Assistance to the community assessment group in identifying observable high-risk behaviors which lead to preventable mortality and morbidity.

- d. Identification of and coordination with other local health, social, and mental health services and programs.
  - e. Determination of social and financial resources.
  - f. Enrollment in comprehensive primary health care services.
  - g. Free pregnancy testing with immediate professional-to-client counseling regarding test result and access to needed services.
2. Provision of adult health services which assures:
- a. Entry into or continuation of primary care.
  - b. Preventive health care consistent with periodicity schedule.
    - 1) History, physical examinations, developmental assessments, laboratory tests, and assessment of dental status and continuation of preventive and restorative dental services with attention to periodontal disease.
    - 2) Nutrition assessment with diet modification, counseling and referral to food assistance programs where appropriate (food stamps, food pantries).
    - 3) Patient education and anticipatory guidance covering normal maturation, nutrition, physical activity, injury prevention, medication management, and lifestyle risk factors related to conditions such as cancer, heart disease, stroke, chronic lung disease, liver disease and substance abuse.
    - 4) Psychosocial needs assessment with referral to social and mental health services where appropriate.
    - 5) Family planning information and services.
    - 6) STD information, screening and treatment or referral for treatment.
    - 7) Documentation and completion of immunization schedule.
    - 8) History of exposure to environmental health hazards common in the workplace and the community, including but not limited to ultraviolet light, pesticides, chemical toxins, second-hand smoke and noise.
    - 9) Lifestyle assessment with special attention on high-risk behaviors which lead to injury risks, violence, substance abuse (tobacco, alcohol, and drugs), pregnancy, poor nutritional state, STD, AIDS, suicides and chronic disabling conditions.
  - c. Individual health care plans implemented by the appropriate team member in the health care setting, the home or other pertinent site.
  - d. Comprehensive health education which promotes healthy lifestyles and which improves intergenerational family relationships.
  - e. Geographically accessible site(s) for primary health care.

3. Linkage and referral services which assure:
  - a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Identification of resources to meet needs identified in the health care plan.
  - d. Education and training of the adult as a health care consumer highlighting both rights and responsibilities of the individual for personal health care.
  - e. Identification of primary care provider(s).
  - f. Professional leadership to assist the community assessment group establish age-related objectives.
  - g. Confidentiality, maintenance, and timely transfers of patients' records among providers.
  - h. Identification of support groups to assist adults and families with special problems.

C. Adult Services (65-84 years) and Adult Services (85 years and older)

*Healthy People 2000* states the "...health profile of American adults is substantially determined by behavioral risk factors."<sup>6</sup> In young adulthood, many people would benefit from a modification of lifestyle behaviors to more positively affect their later adult years.

In the age groups of 65 to 84 years and 85 years and older, assessment tools must be selected which are appropriate to the health status and functional ability of the individual rather than based on age as the only factor. Appendix B is a comprehensive periodicity schedule for providing screening and health services.

The 85 years of age and older population is rapidly expanding in numbers and increasing in life expectancy. Consequently this age group requires specific community assessment and program development which take into account accessible health resources, social support systems, noninstitutional housing and meals.

1. Outreach and case-finding which assures:
  - a. Public awareness of the necessity and availability of continuous comprehensive adult health services, including rehabilitative and restorative.
  - b. Targeting hard-to-reach, high-risk population segments such as homeless, minorities, singles and females.
  - c. Assistance to the community assessment group in identifying observable high-risk behaviors which lead to preventable mortality and morbidity.

- d. Identification of and coordination with other local health, social and mental health services and programs.
  - e. Determination of social and financial resources.
  - f. Enrollment in comprehensive primary health care services.
2. Provision of older adult health services which assures:
- a. Continuation of primary care.
  - b. Preventive health care consistent with periodicity schedule.
    - 1) Social and medical histories and evaluation of medications used and their effect.
    - 2) Physical examination including sensory testing, dental status and laboratory studies.
    - 3) Nutrition assessment with counseling and referral to food assistance programs such as home-delivered meals and nutrition sites.
    - 4) Patient education and anticipatory guidance covering normal maturation, physical activity, nutrition, injury prevention, preventive health care, family relationships, sexuality, mental health, medication management, and substance abuse (alcohol, tobacco and drugs).
    - 5) Psychosocial needs assessment (including social support system, depression, bereavement, suicidal tendencies and elder abuse) with referral to social and mental health services.
    - 6) STD information, screening and treatment or referral for treatment.
    - 7) Documentation and completion of immunization schedule.
    - 8) Screening for exposure to environmental health hazards common in the community and home, including risk assessment for falls, vehicular accidents, ultraviolet light, pesticides, chemical toxins, noise, second-hand smoke.
    - 9) Lifestyle assessment with special attention on high-risk behaviors which lead to injury risks, violence, substance abuse (tobacco, alcohol, and drugs), poor nutritional state, STD, AIDS, suicides, social isolation, and chronic disabling conditions.
  - c. Assessment of functional status utilizing a tool which evaluates activities of daily living, instrumental activities of daily living, and mini-mental status.
  - d. Individual health care plans with care coordination, implemented by the appropriate team member in the health care setting, the home or other pertinent site.
  - e. Comprehensive health education which promotes healthy lifestyles and which preserves independent functioning.
  - f. Geographically accessible site(s) for primary health care.

3. Linkage and referral services which assure:
  - a. Assistance with transportation needs.
  - b. Professional education to inform providers of available community services.
  - c. Identification of resources to meet needs identified in the health care plan, such as protective services, adult day care, and comprehensive home care services.
  - d. Education and training of the older adult as a health care consumer highlighting both rights and responsibilities of the individual for personal health care.
  - e. Identification of primary care provider(s).
  - f. Professional leadership to assist the community assessment group establish age-related objectives.
  - g. Creative community responses such as maintenance of elderly in independent living through home health services for the special needs of the elderly such as social, recreational, educational, vocational and financial management assistance.
  - h. Confidentiality, maintenance, and timely transfers of patients' records among providers.
  - i. Identification of support groups to assist older adults and families with special problems.

#### Evaluation of Personal Health Services

There are life cycle outcome indicators which should be followed over time by each local health department. Although data may be examined on a short-term basis, e.g., less than five years, trends should be studied over a ten-year period. The Missouri Department of Health's Center for Health Statistics will play the leading role in compiling local and state health indicators and statistics as well as other demographic information essential to the evaluation process. The Center will also provide access to the information available from other registries keeping specific health and health-related data.

The state health department will establish a consensus set of indicators for assessing community health status as well as monitoring progress toward the Year 2000 objectives. The local health departments will contribute efforts toward achieving these state priorities as well as to local objectives. Additional indicators will need to be addressed depending on assessed needs and priorities, and may change periodically based on new problems identified and on data availability.

The following examples of outcome indicators are not meant to be all inclusive but merely examples of outcomes which can be established and measured.

A. Maternal

- Existence of system of care (as outlined in core components) accessible to all (regardless of ability to pay)
- Free pregnancy tests available, with initial prenatal visit or with family planning referral within four weeks
- Inadequate prenatal care rate (ten-year trend)
- Low birth weight rate (ten-year trend)
- Fetal death rate (ten-year trend)

B. Neonatal

- Existence of system of care accessible to all
- Neonatal mortality rate (ten-year trend)
- Percent Medicaid eligibles receiving Healthy Children and Youth (HCY) services

C. Postneonatal

- Existence of system of care accessible to all
- Postneonatal mortality rate (ten-year trend)
- Percent Medicaid eligibles receiving HCY services
- Leading causes of infant death

D. Child

- Existence of system of care accessible to all
- Four leading causes of mortality
- Immunization rates
- Percent Medicaid eligibles receiving HCY services
- Twenty leading hospital discharge diagnoses

E. Prepuberty Children and Adolescents

- Existence of system of care accessible to all
- Four leading causes of mortality
- Percent Medicaid eligibles receiving HCY services
- Teen pregnancy rate
- Close birth spacing (<18 months between pregnancies)
- Sexually transmitted disease rates
- Twenty leading hospital discharge diagnoses

**F. Adults 20-39**

- Existence of system of care accessible to all
- Four leading causes of mortality
- Fertility rates
- Close birth spacing (<18 months between pregnancies)
- Sexually transmitted disease rates
- Twenty leading hospital discharge diagnoses

**G. Adults 40-64**

- Same as adults 20-39 minus close birth spacing

**H. Adults 65-84 and 85+**

- Existence of system of care accessible to all
- Four leading causes of mortality
- Twenty leading hospital discharge diagnoses
- Sexually transmitted disease rates
- Rate of population maintained in personal residence vs. long-term care facility

## Communicable Disease Control

### Introduction

"To safeguard the health of the people of Missouri." (section 192.020, RSMo (1986))

It is the duty of the Department of Health and local health departments to uphold this law. Communicable diseases remain an important cause of illness and death in Missouri. The recent increase in tuberculosis and the continued high incidence of sexually transmitted diseases, including AIDS, serve as a reminder that the prevention and control of communicable diseases must remain a high priority of local health departments. Communicable diseases pose a potential threat, but many can be prevented. Specific means exist for combating many of these diseases:

- Public health education about basic hygienic practices and risk reduction in the home, school and occupational settings to prevent the transmission of disease, including education of health care workers.
- Surveillance systems to detect diseases, as an epidemiologic tool to enhance prevention and control strategies.
- Widespread use of vaccines, which are among the safest and most effective preventive weapons.

Animal diseases and environmental factors frequently play important roles in both cause and prevention of diseases of humans. As communicable disease surveillance utilizes the epidemiologic approach, these environmental and animal determinants must be studied as part of the host-vector disease trend.

### Goal

Reduce or eliminate infectious diseases that are preventable or controllable by immunization, environmental control, education or direct intervention.

### Objectives

- A. The local health department shall have the capacity to encourage and provide the means for active surveillance and prompt reporting of communicable diseases within its jurisdiction.
  1. Sentinel active surveillance shall be carried out through weekly phone calls to identified hospitals; the offices of identified physicians expected to see communicable diseases cases; and selected schools, preschools, day-care centers and nursing homes.
  2. All physicians and hospitals shall be encouraged to report communicable diseases as required by law and shall be provided with the necessary information and forms for reporting (CD-1 and Epidemic Surveillance Reporting forms).
  3. Upon notification of a communicable disease, the local health department shall initiate appropriate investigation in a timely manner to provide effective intervention and control measures. Where appro-

priate public health intervention through prophylaxis is indicated, current protocols should be utilized as stated in the appropriate program policy and procedure manual.

4. Nosocomial outbreaks shall be reported directly to the Nosocomial Infection Control Program of the Department of Health. The director of the Nosocomial Program will inform appropriate persons in the district and local health department (see Environmental Health Services, Introduction).
- B. The capacity shall exist to investigate and adequately control all outbreaks of communicable or other diseases by coordinated medical and environmental epidemiological intervention.
1. The designated county communicable disease coordinator and an environmental sanitarian should complete sufficient education and training to enable the local health department to meet this objective. Training shall be equivalent to that gained through the courses "Principles of Epidemiology" and "Applied Epidemiology." These classes are presented by the DOH's Bureau of Communicable Disease Control and Office of Personnel and Training.
  2. The local health department shall coordinate outbreak investigations and control efforts with the Department of Health in a means satisfactory to both departments, including prompt notification of outbreaks and request for consultation and/or assistance if needed. This policy is satisfied through use of the most current Department of Health policy.
  3. Nosocomial outbreak investigations in long-term care facilities shall be managed in accordance with the inter-agency agreement of the Department of Health and the Division of Aging.
- C. The local health department shall have the capacity to provide or assure provision of appropriate immunizations to protect the community from vaccine-preventable diseases.
1. Regularly scheduled immunization clinics shall be conducted to provide vaccine for preventable diseases to the population at risk.
  2. Ongoing immunization clinics shall be provided to assist schools, preschools and day-care centers to comply with the school immunization and day-care laws.
  3. Provisions for special immunization clinics to control spread of disease through outbreaks shall be initiated and implemented when needed.
  4. The local health department shall encourage and provide recommended immunizations to the adult population.
  5. Local health department personnel shall be adequately immunized.
- D. The local health department shall have the capacity to provide or assure appropriate follow-up and treatment of all newly reported cases of tuberculosis infection and disease.

1. In local health departments where adequate personnel and facilities exist, diagnostic and treatment services shall be available.
  2. In lieu of clinical services, if adequate personnel and facilities are lacking, the local health department shall implement a plan for the referral of tuberculosis patients, suspects and contacts to other clinics or private physicians for clinical services.
  3. After diagnosis and evaluation, the local health department shall provide tuberculosis services in a manner consistent with the most current recommendation of the Missouri Advisory Committee's "Elimination of Tuberculosis Strategic Plan" (including Core Curriculum which can be obtained from Missouri Department of Health's Bureau of Tuberculosis Control or the American Lung Association).
- E. The local health department shall have the capacity to assure that all sexually transmitted disease cases, suspects and sexual contacts shall receive adequate examination and treatment.
1. In local health departments where adequate personnel and facilities exist, diagnostic and treatment services shall be available.
  2. In lieu of clinical services, if adequate personnel and facilities are lacking, the local health department shall implement a plan for the referral of STD patients, suspects and contacts to other clinics or private physicians for clinical services. (Reference most current CDC guidelines for treatment protocol.)
- F. The local health department shall have the capacity to assure that clients found to be "at risk" for the HIV antibody shall receive appropriate referral for services. Assistance should be requested from the Bureau of AIDS Prevention.
1. The local health department shall have appropriate staff with HIV antibody counselor training.
  2. The local health department shall incorporate routine HIV risk assessment activities into clinic settings (i.e., family planning, prenatal, STD, etc.).
  3. The local health department shall facilitate client referral into an established HIV antibody counseling and testing site for those persons identified to be "at risk" for HIV, if services cannot be provided directly on site.
  4. The local health department shall assure facilitation of referral into the Bureau of AIDS Prevention's Care Coordination System for all HIV-infected clients.
- G. As part of the comprehensive health education plan, local health departments shall encourage the education of its clientele, the general population and health professionals regarding public health issues and disease control activities. In addition, information shall be widely disseminated regarding services available through the health department. All efforts should be made by local health departments to include infection control practitioners from local hospitals and nursing homes in planning communicable disease prevention and control programs.



## Environmental Health Services

### Introduction

Environmental health is that area of public health service generally accepted as the "activity which deals with the protection of human health through the management, control and prevention of environmental factors which may adversely affect the health of individuals." In light of this definition Task Force II has developed the following report which identifies the core elements or the basic components of an environmental health program that a local health department should possess if they are to provide a reasonably healthy environment for their constituents.

It is no secret that the quality of the delivery of any public service is most meaningful at the interface between a bureaucracy and its constituency. It was at this point that deliberations were begun to identify the core elements that should be included in any elementary environmental health program. The core elements were identified as:

1. Food protection
2. Water protection
3. Waste disposal (waste water, solid waste, hazardous waste, air quality)
4. Shelter
5. Animal/vector control
6. Environmental health surveillance and epidemiological investigation

A local health department that provides less than these six core elements is considered to be providing only partial environmental health protection for the community, and will most likely experience an outbreak of disease some time in the future that could have been environmentally related.

Even though the state departments of health, agriculture and natural resources have the responsibility to address all the aspects of environmental health concerns within the state, they do not have the finances or resources to extend their impact to all citizens of the state evenly. Therefore, large gaps exist in the environmental health protection system which, if not filled by the local health department, provide the opportunity for environmentally related diseases to break out in the unprotected portions of the state. It is in this setting that the task force has studied, concentrated its efforts, and developed the goals and objectives.

In its assessment of environmental health services, Task Force II found many instances which require legislative delegation of additional authority to local health departments. In these instances, goals have been established to obtain specific legislative and regulatory authority. This is somewhat unique to this section. Other sections in this report focus exclusively on activities and responsibilities of local health departments. However, attainment of these legislative goals is a prerequisite to having local health department standards to implement at the community level.

In addition to the core elements listed above, other elements of environmental health that are essential to the management and control of environmental health program are:

1. Campground sanitation and safety
2. Home accident prevention
3. Nosocomial disease control (see Communicable Disease Control, A.4. and B.3.)
4. Interstate carrier sanitation
5. Hazardous and toxic material control
6. Noise control
7. Occupational health
8. Radiological health
9. Fluoridation

These elements should be managed at the state level with the local health department assisting wherever and whenever possible. The appropriate state department would be expected to develop adequate control measures and make available to the local health department, consultative services and training, when needed, in the local community.

Goals have been developed, taking the broad long-term view of the core element, while the objectives have been written with the short-term view. Standards will be developed providing benchmarks that will be available to measure the progress of implementation and to evaluate the effectiveness of the various elements.

### Responsibilities

The State Board of Health, state departments of agriculture, natural resources and health and local health departments across the state share the responsibility for the delivery of environmental health services in Missouri.

The State Board of Health has the responsibility of implementing policy set down by the state legislature, and making recommendations to the Governor's office on programs and funding for public health. The Department of Agriculture is responsible for the protection of the milk supply, the use of pesticides, and animal health. Air quality, waste water management, solid waste management, hazardous and toxic material control, safe drinking water, and groundwater management are under the administration of the Department of Natural Resources.

The Department of Health administers the laws of the state through programs managed from a central office, a number of district offices, and the use of cooperative agreements with local health departments across the state. A significant fact that came to light during the task force's deliberation was that every county in the state needs to be served directly by one or more sanitarians.

The local health department should in turn provide within its available resources an environmental health program that incorporates the six core elements listed in the Introduction of this section.

### Training

The goals and objectives in this section point out that adequate statewide environmental health protection requires the cooperation of several state departments and agencies delivering their basic services at the local level which may be accomplished through the local health department.

Since the quality of service is measured at the interface between the bureaucracy and its constituency, the need exists to provide the state with a cadre of well-trained individuals at all levels of government, particularly at the local level. The task force felt that the state department with statutory responsibility for a particular segment of the environmental health field should be responsible for providing the necessary training for that segment. Training should become a basic budgetary item for the Department of Health as well as other state departments. It is anticipated that an integral part of any training program would be a certification of local programs and individual skills. The local health department in turn would meet and maintain the requirements set down by the responsible state department. This would assure that all areas of the state, every segment of the population, and members of industry would receive the same level and quality of service.

### Management

In addition to training, the local health department needs to have management tools available that will enable them to make assessments and develop plans for response to their community's current and future environmental health needs as well as evaluations of their current activities. This information would be used to justify new budget and legislative initiatives, and would enable the local health department to set priorities when available resources do not meet the demand. The task force feels that standardized activity report forms, program data bases and procedures for evaluation will be needed.

### Elements for Environmental Health Services

#### I. Food Protection

Goal: Residents of the state will be protected from food-related illness or injury.

- A. By the year 1995, there shall be in place a statewide licensing program for all establishments that prepare, serve, process, transport or store food products.
- B. A statewide uniform code will be adopted that contains plan review and construction standards for all facilities that prepare, serve, process, transport or store food products.

- C. Local health departments will standardize code enforcement statewide in cooperation with the state Department of Health, through a training and evaluation program coordinated by the state.
- D. Every food product facility will be inspected at least each six months or more often as set forth by local ordinances.
- E. All managers of food service operations will be certified in the proper food handling practices and food-borne disease prevention.
- F. By the year 1995 there should be a signed memo of understanding and cross compliance standards between the state departments of health, natural resources and agriculture and the Partnership Council.
- G. By the year 1995 there shall be developed and distributed training curriculum for foodborne disease prevention and proper food handling practices.
- H. By the year 1995, a licensing or permit program will be developed and implemented to regulate ice manufacturing and distribution to assure the safety and purity of ice consumed by the public.

**Responsibilities:**

The state Department of Health will be responsible for statewide training, coordination and certification of food protection programs administered by local health departments and/or district health offices. DOH will work in partnership with local health officials to develop and pass statewide licensing legislation and a unified code for establishments that prepare, serve, process, transport or store food products. The department will take the lead in the development and signing of a memo of understanding between the departments of natural resources, agriculture and health and local health departments that are needed to assure a safe supply of food to the public.

Local health departments will be responsible for implementing standardized code enforcement of establishments that prepare, serve, process, transport or store food products within their respective jurisdictions. They will work closely with the state Department of Health in the development and passage of statewide legislation and memos of understanding that will be needed to establish an effective food protection program, one that protects the public and is equitable for those within the food industry.

**II. Water Protection.** This element contains the sub-elements of drinking water and recreational water.

**Goal:** Residents of the state will have access to drinking water that is free from harmful contaminants and recreational facilities for water-contact sports that possess the necessary health and safety features to protect the public.

### A. Drinking Water

1. Private well water quality standards will be developed to evaluate the private water supplies statewide.
2. By the year 2000, approved laboratory services shall be readily accessible to all sections of the state for private and public water testing.
3. By the year 2000, existing construction standards will be monitored on all private and noncommunity water wells throughout the state by a joint effort of the state departments of health and natural resources and the local health departments.
4. By the year 2000, the Partnership Council in conjunction with the state departments of health and natural resources will initiate legislation requiring a community-type well be constructed when more than one connection is served by a drinking water well.
5. State, district and local health departments will work to expand public drinking water availability statewide through water districts and community water supplies.

### B. Recreational Water

1. Laboratory services will be readily available statewide for the analysis of recreational water samples.
2. Recreational water facilities will be inspected monthly as long as they are in operation by either the state Department of Health or local health department.
3. By the year 1995, regulations will be adopted that establish standards for recreational water facilities.
4. Training by the local health department or state Department of Health shall be available for the owners and operators of recreational water facilities.

#### Responsibilities:

The state Department of Health, working in partnership with local health departments, will develop statewide legislation, rules, guidelines and standards, and provide laboratory services that will assure safe and healthful private/noncommunity drinking water supplies and recreational waters throughout the state. They will develop and present training programs for local health officials and operators of private/noncommunity water supplies and recreational water facilities.

The local health department will implement the legislation, rules, standards and guidelines developed in partnership with the state Department of Health. They shall assure that appropriate laboratory analysis will be performed whenever necessary to certify that private/noncommunity water supplies and recreational water facilities are safe and healthful. The local health department will assist the state Department

of Health in providing training to local owners and operators of private/noncommunity water supplies and recreational water facilities.

- III. Waste. This element contains the sub-elements of waste water, solid waste, hazardous waste and air quality.

Goal: Disease, injury and adverse health effects will be prevented among residents of the state through the proper treatment, recovery and disposal of all waste.

**A. Waste Water**

1. Working jointly with the state departments of health and natural resources, local health departments will work to assure that groundwater contamination from all possible polluting sources does not occur.
2. By the year 1994, statewide uniform design, construction and effluent standards will be adopted for on-site sewage disposal systems that are under 1500 gallons.
3. By the year 1995, statewide legislation will implement the required design, construction and operation of wastewater disposal systems that are under 1500 gallons.
4. The state departments of health and natural resources will be assisted by local health departments in the monitoring of the effluent from wastewater treatment facilities.
5. Through a memorandum of understanding between the state departments of health and natural resources and the Partnership Council, local health departments will monitor surface waters within their respective jurisdictions for any environmental degradation.

**B. Solid Waste**

1. By the year 2000, local health departments will have the capability of providing consultation and support for local jurisdictions to require statewide recycling and resource recovery.
2. In conjunction with the state departments of health and natural resources, local health departments will assure the proper treatment and disposal of solid waste.

**C. Hazardous Waste**

1. By the year 2000, a model code for the collection and disposal of household hazardous waste will be available for adoption by communities of the state.
2. In conjunction with the state departments of health and natural resources, local health departments will oversee the public health aspects of the storage, transportation and disposal of

hazardous wastes in their respective jurisdictions by participation on their respective local emergency planning committee.

3. The departments of health and natural resources response action to hazardous waste incidents will be assisted to the extent of the capabilities of the local health departments.
4. By the year 1995, local health departments in conjunction with the Department of Natural Resources will encourage hazardous waste reduction within their respective jurisdictions through resource recovery and waste exchange programs.

#### D. Air Quality

By the year 2000, local health departments working with the state departments of health and natural resources will develop local air quality assurance programs.

#### Responsibilities:

The cooperation between the state departments of health and natural resources in partnership with local health departments is critical in meeting these goals and objectives. The state departments must work in tandem to develop legislation, rules, standards and guidelines in partnership with local health departments to provide the tools necessary to accomplish the goals of the element of waste. Memos of understanding and working agreements must be developed that will tie the parties together in a manner that allows the local health departments to work cooperatively with both the departments of health and natural resources. Training in all areas will need to be developed by the appropriate state department and made available to the local health department.

The local health departments must take upon themselves the commitment to develop their agencies through the training made available to them and to work in partnership with the appropriate state department. They will provide support, consultation and public education, and assist in enforcement of state laws and rules as needed by the appropriate state department.

### IV. Shelter. This element contains the subelements of commercial lodging, housing and institutional facilities.

Goal: A safe, sanitary living and working environment will be assured for individuals and the public as a whole.

#### A. Commercial Lodging

1. By the year 1995 local health departments will be adequately staffed with trained personnel to conduct inspections of all commercial lodging facilities for compliances with the state law at least two times a year.
2. Local health departments in conjunction with the state departments of health and natural resources and the state and/or local

fire marshals' offices will assure compliances with applicable state and local laws for drinking water, sewage disposal, solid waste removal and fire safety.

**B. Institutional Sanitation**

1. By the year 1995, a model code for day care centers will be available for adoption by local communities on a statewide basis and enforced by the local health departments.
2. All day care facilities licensed by the state will be inspected annually in accordance with applicable state laws.
3. By the year 1995, local health agencies will have developed programs for education and consultation of all day care facilities for the prevention of communicable diseases, accidents and injuries.
4. By the year 2000, health standards for school restrooms and gymnasiums as well as correctional institutions shall be developed in conjunction with the state departments of elementary and secondary education and corrections and human resources for adoption by the local health department.

**C. Housing**

1. By the year 1995, a model code will be available for adoption by local communities and enforced by the local health departments. The code will establish minimum standards for safe, sanitary living quarters that will be dry, warm and free from insects and rodents, with adequate lighting, ventilation, living space, food storage and preparation facilities.
2. By the year 1995, a model code will be available for adoption by local communities and enforced by the local health departments. It will establish a public nuisance code applicable to the residential areas of the community.
3. By the year 1995, local health departments will have programs available for education and consultation on indoor air problems.

**Responsibilities:**

The state Department of Health, working in partnership with local health departments and the state departments of natural resources, corrections and human resources and elementary and secondary education, will develop guidelines, rules, standards, memos of understanding, and needed legislation to work with commercial lodging establishments, day care centers, schools and correctional facilities. Training materials and programs will be developed jointly with other state departments for use by local health departments. These efforts will result in safer, more sanitary lodging establishments and public use institutions.

Local health departments in partnership with the state health department will develop model codes for safe and sanitary housing, abate-

ment of public nuisances, and educational programs and materials concerning indoor air problems in the home and office. Local health departments will train their staff members and enforce the commercial lodging program within their respective jurisdictions. They will encourage local adoption of housing and nuisance codes and provide education and consultation on matters of health and safety in the home.

## V. Animal and Vector Control

**Goal:** To hold the health of individuals and communities at minimal risk from vector and animal-related human health hazards and associated nuisance conditions.

- A. Minimum standards will be developed, based on existing state-wide legislation, to protect the public from insects, rodents, zoonotic diseases, and the hazards and nuisances resulting from the housing of domestic and wild animals.
- B. By the year 1995, model codes will be available for adoption by local communities to control insect and rodent populations as well as the housing of domestic and wild animals.
- C. By the year 2000, local communities will have in operation a surveillance and educational system that will monitor and educate the public regarding the hazards and incidence of zoonotic diseases, insects and rodents, and the protective measures that may be taken against them.

### Responsibilities:

The state Department of Health in partnership with local health departments will prepare enabling legislation and develop minimum standards and a statewide surveillance system to protect the public from insect- and animal-borne diseases and the hazards and nuisances resulting from housing animals. Model codes will be developed and made available to local communities.

Local health departments will work for the adoption of model animal control ordinances and participate in the statewide surveillance system.

## VI. Environmental Health Surveillance and Epidemiological Investigations

**Goal:** The establishment of a statewide environmental surveillance and epidemiological network that links all state and local health departments together for the detection and control of environmentally transmitted diseases.

**A. Environmental Surveillance**

1. By the year 1995, the local health departments will be provided with a surveillance network that will detect, monitor and investigate environmental conditions that contribute to the mortality and morbidity of the local community.
2. By the year 1995, the surveillance network will be capable of providing to the local health departments the necessary data for the development of research strategies, or prevention and control measures required to protect the local community from a threatening disease.
3. By the year 1995, a methodology for the evaluation of the impact and effectiveness of control measures used by state or local health departments during a disease outbreak will be operational.

**B. Epidemiological Investigation**

1. By the year 2000, local health departments will have access to competent medical, statistical and epidemiological consultation and appropriate support services to carry out investigations, special studies and health data analyses.
2. By the year 2000, local health departments will have access to or be served by laboratory facilities capable of performing the appropriate analyses for the diagnosis, confirmation and identification of diseases, risk factors and environmental conditions of public health significance.

**Responsibilities:**

The state Department of Health working with other professionals across the state will develop an epidemiological surveillance and investigation system and a methodology for the evaluation of the impact and effectiveness of disease control measures used by state and local health departments. These systems and methods will be accessible and friendly to the local health departments.

Local health departments will provide epidemiological data to the surveillance system and avail themselves of the consultation, data and support services provided through the state Department of Health to carry out investigations of local disease outbreaks and assist the state in special studies and health data analyses.

Table 1. Birth to 18 Months Schedule: 2, 4, 6, 15, 18 Months*		Leading Causes of Death: Conditions originating in perinatal period Congenital anomalies Heart disease Injuries (nonmotor vehicle) Pneumonia/influenza
<b>SCREENING</b> Height and weight Hemoglobin and hematocrit <sup>1</sup> <i>HIGH-RISK GROUPS</i> Hearing <sup>2</sup> (HR1) Erythrocyte protoporphyrin (HR2)	<b>PARENT COUNSELING</b> <b>Diet</b> Breastfeeding Nutrient intake, especially iron-rich foods <b>Injury Prevention</b> Child safety seats Smoke detector Hot water heater temperature Stairway gates, window guards, pool fence Storage of drugs and toxic chemicals Syrup of ipecac, poison control tele- phone number <b>Dental Health</b> Baby bottle tooth decay <b>Other Primary            Preventive Measures</b> Effects of passive smoking	<b>IMMUNIZATIONS &amp;            CHEMOPROPHYLAXIS</b> Diphtheria-tetanus-pertussis (DTP) vaccine <sup>3</sup> Oral poliovirus vaccine (OPV) <sup>4</sup> Measles-mumps-rubella (MMR) vaccine <sup>5</sup> <i>Haemophilus influenzae</i> type b (Hib) conjugate vaccine <sup>6</sup> <i>HIGH-RISK GROUPS</i> Fluoride supplements (HR3)
This list of preventive ser- vices is not exhaustive. It reflects only those topics reviewed by the U.S. Pre- ventive Services Task Force. Clinicians may wish to add other preventive ser- vices on a routine basis, and after considering the patient's medical history and other individual circum- stances. Examples of target conditions not specifically examined by the Task Force include: Developmental disorders Musculoskeletal malfor- mations Cardiac anomalies Genitourinary disorders Metabolic disorders Speech problems Behavioral disorders Parent/family dysfunction		<b>FIRST WEEK</b> Ophthalmic antibiotics <sup>7</sup> Hemoglobin electrophoresis (HR4) <sup>7</sup> T4/TSH <sup>8</sup> Phenylalanine <sup>9</sup> Hearing (HR1)
		<b>Remain Alert For:</b> Ocular misalignment Tooth decay Signs of child abuse or neglect
*Five visits are required for immunizations. Because of lack of data and differing patient risk profiles, the scheduling of additional visits and the frequency of the individual preventive services listed in this table are left to clinical discretion (except as indicated in other footnotes).		

1. Once during infancy. 2. At age 18-month visit, if not tested earlier. 3. At ages 2, 4, 6, and 15 months. 4. At ages 2, 4, and 15 months. 5. At age 15 months. 6. At age 18 months. 7. At birth. 8. Days 3 to 6 preferred for testing.

Table 1. Birth to 18 Months

**HR1** Infants with a family history of childhood hearing impairment or a personal history of congenital perinatal infection with herpes, syphilis, rubella, cytomegalovirus, or toxoplasmosis; malformations involving the head or neck (e.g., dysmorphic and syndromal abnormalities, cleft palate, abnormal pinna); birthweight below 1500 g; bacterial meningitis; hyperbilirubinemia requiring exchange transfusion; or severe perinatal asphyxia (Apgar scores of 0-3, absence of spontaneous respirations for 10 minutes, or hypotonia at 2 hours of age).

**HR2** Infants who live in or frequently visit housing built before 1950 that is dilapidated or undergoing renovation; who come in contact with other children with known lead toxicity; who live near lead processing plants or whose parents or household members work in a lead-related occupation; or who live near busy highways or hazardous waste sites.

**HR3** Infants living in areas with inadequate water fluoridation (less than 0.7 parts per million).

**HR4** Newborns of Caribbean, Latin American, Asian, Mediterranean, or African descent.

Table 2. Ages 2–6 Schedule: See Footnote*		Leading Causes of Death: Injuries (nonmotor vehicle) Motor vehicle crashes Congenital anomalies Homicide Heart disease
<b>SCREENING</b> Height and weight Blood pressure Eye exam for amblyopia and strabismus <sup>1</sup> Urinalysis for bacteriuria <i>HIGH-RISK GROUPS</i> Erythrocyte protoporphyrin <sup>2</sup> (HR1) Tuberculin skin test (PPD) (HR2) Hearing <sup>3</sup> (HR3)	<b>PATIENT &amp; PARENT COUNSELING</b> <b>Diet and Exercise</b> Sweets and between-meal snacks, iron-enriched foods, sodium Caloric balance Selection of exercise program <b>Injury Prevention</b> Safety belts Smoke detector Hot water heater temperature Window guards and pool fence Bicycle safety helmets Storage of drugs, toxic chemicals, matches, and firearms Syrup of ipecac, poison control telephone number <b>Dental Health</b> Tooth brushing and dental visits <b>Other Primary Preventive Measures</b> Effects of passive smoking <i>HIGH-RISK GROUPS</i> Skin protection from ultraviolet light (HR4)	<b>IMMUNIZATIONS &amp; CHEMOPROPHYLAXIS</b> Diphtheria-tetanus-pertussis (DTP) vaccine <sup>4</sup> Oral poliovirus vaccine (OPV) <sup>4</sup> <i>HIGH-RISK GROUPS</i> Fluoride supplements (HR5)
This list of preventive services is not exhaustive. It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include: Developmental disorders Speech problems Behavioral and learning disorders Parent/family dysfunction		Remain Alert For: Vision disorders Dental decay, malalignment, premature loss of teeth, mouth breathing Signs of child abuse or neglect Abnormal bereavement
*One visit is required for immunizations. Because of lack of data and differing patient risk profiles, the scheduling of additional visits and the frequency of the individual preventive services listed in this table are left to clinical discretion (except as indicated in other footnotes).		

1. Ages 3–4. 2. Annually. 3. Before age 3, if not tested earlier. 4. Once between ages 4 and 6.

Table 2. Ages 2–6

High-Risk Categories

**HR1** Children who live in or frequently visit housing built before 1950 that is dilapidated or undergoing renovation; who come in contact with other children with known lead toxicity; who live near lead processing plants or whose parents or household members work in a lead-related occupation; or who live near busy highways or hazardous waste sites.

**HR2** Household members of persons with tuberculosis or others at risk for close contact with the disease; recent immigrants or refugees from countries in which tuberculosis is common (e.g., Asia, Africa, Central and South America, Pacific Islands); family members of migrant workers; residents of homeless shelters; or persons with certain underlying medical disorders.

**HR3** Children with a family history of childhood hearing impairment or a personal history of congenital perinatal infection with herpes, syphilis, rubella, cytomegalovirus, or toxoplasmosis; malformations involving the head or neck (e.g., dysmorphic and syndromal abnormalities, cleft palate, abnormal pinna); birthweight below 1500 g; bacterial meningitis; hyperbilirubinemia requiring exchange transfusion; or severe perinatal asphyxia (Apgar scores of 0–3, absence of spontaneous respirations for 10 minutes, or hypotonia at 2 hours of age).

**HR4** Children with increased exposure to sunlight.

**HR5** Children living in areas with inadequate water fluoridation (less than 0.7 parts per million).

**Table 3.**  
**Ages 7-12**

Schedule: See Footnote\*

**Leading Causes of Death:**

Motor vehicle crashes  
Injuries (nonmotor vehicle)  
Congenital anomalies  
Leukemia  
Homicide  
Heart disease

SCREENING	PATIENT & PARENT COUNSELING	CHEMOPROPHYLAXIS
Height and weight Blood pressure <b>HIGH-RISK GROUPS</b> Tuberculin skin test (PPD) (HR1)	<b>Diet and Exercise</b> Fat (especially saturated fat), cholesterol, sweets and between-meal snacks, sodium Caloric balance Selection of exercise program  <b>Injury Prevention</b> Safety belts Smoke detector Storage of firearms, drugs, toxic chemicals, matches Bicycle safety helmets  <b>Dental Health</b> Regular tooth brushing and dental visits  <b>Other Primary Preventive Measures</b> <b>HIGH-RISK GROUPS</b> Skin protection from ultraviolet light (HR2)	<b>HIGH-RISK GROUPS</b> Fluoride supplements (HR3)
<p><b>This list of preventive services is not exhaustive. It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include:</b></p> <ul style="list-style-type: none"> <li>Developmental disorders</li> <li>Scoliosis</li> <li>Behavioral and learning disorders</li> <li>Parent/family dysfunction</li> </ul>		<p><b>Remain Alert For:</b></p> <ul style="list-style-type: none"> <li>Vision disorders</li> <li>Diminished hearing</li> <li>Dental decay, malalignment, mouth breathing</li> <li>Signs of child abuse or neglect</li> <li>Abnormal bereavement</li> </ul>

\*Because of lack of data and differing patient risk profiles, the scheduling of visits and the frequency of the individual preventive services listed in this table are left to clinical discretion.

**Table 3. Ages 7-12**

**High-Risk Categories**

**HR1** Household members of persons with tuberculosis or others at risk for close contact with the disease; recent immigrants or refugees from countries in which tuberculosis is common (e.g., Asia, Africa, Central and South America, Pacific Islands); family members of migrant workers;

residents of homeless shelters; or persons with certain underlying medical disorders.

**HR2** Children with increased exposure to sunlight.

**HR3** Children living in areas with inadequate water fluoridation (less than 0.7 parts per million).

**Table 4.**  
**Ages 13–18**

Schedule: See Footnote\*

**Leading Causes of Death:**  
Motor vehicle crashes  
Homicide  
Suicide  
Injuries (nonmotor vehicle)  
Heart disease

SCREENING	COUNSELING	IMMUNIZATIONS & CHEMOPROPHYLAXIS
<b>History</b> Dietary intake Physical activity Tobacco/alcohol/drug use Sexual practices  <b>Physical Exam</b> Height and weight Blood pressure <i>HIGH-RISK GROUPS</i> Complete skin exam (HR1) Clinical testicular exam (HR2)  <b>Laboratory/Diagnostic Procedures</b> <i>HIGH-RISK GROUPS</i> Rubella antibodies (HR3) VDRL/RPR (HR4) Chlamydia testing (HR5) Gonorrhea culture (HR6) Counseling and testing for HIV (HR7) Tuberculin skin test (PPD) (HR8) Hearing (HR9) Papanicolaou smear (HR10) <sup>1</sup>	<b>Diet and Exercise</b> Fat (especially saturated fat), cholesterol, sodium, iron, <sup>2</sup> calcium <sup>2</sup> Caloric balance Selection of exercise program  <b>Substance Use</b> Tobacco: cessation/primary prevention Alcohol and other drugs: cessation/primary prevention Driving/other dangerous activities while under the influence Treatment for abuse <i>HIGH-RISK GROUPS</i> Sharing/using unsterilized needles and syringes (HR12)  <b>Sexual Practices</b> Sexual development and behavior <sup>3</sup> Sexually transmitted diseases: partner selection, condoms Unintended pregnancy and contraceptive options  <b>Injury Prevention</b> Safety belts Safety helmets Violent behavior <sup>4</sup> Firearms <sup>4</sup> Smoke detector  <b>Dental Health</b> Regular tooth brushing, flossing, dental visits  <b>Other Primary Preventive Measures</b> <i>HIGH-RISK GROUPS</i> Discussion of hemoglobin testing (HR13) Skin protection from ultraviolet light (HR14)	Tetanus-diphtheria (Td) booster <sup>5</sup> <i>HIGH-RISK GROUPS</i> Fluoride supplements (HR15)  <b>This list of preventive services is not exhaustive. It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include:</b> Developmental disorders Scoliosis Behavioral and learning disorders Parent/family dysfunction  <b>Remain Alert For:</b> Depressive symptoms Suicide risk factors (HR11) Abnormal bereavement Tooth decay, malalignment, gingivitis Signs of child abuse and neglect.

\*One visit is required for immunizations. Because of lack of data and differing patient risk profiles, the scheduling of additional visits and the frequency of the individual preventive services listed in this table are left to clinical discretion (except as indicated in other footnotes).

1. Every 1–3 years. 2. For females. 3. Often best performed early in adolescence and with the involvement of parents. 4. Especially for males. 5. Once between ages 14 and 16.

**Table 4. Ages 13–18**

**High-Risk Categories**

- HR1** Persons with increased recreational or occupational exposure to sunlight, a family or personal history of skin cancer, or clinical evidence of precursor lesions (e.g., dysplastic nevi, certain congenital nevi).
- HR2** Males with a history of cryptorchidism, orchiopexy, or testicular atrophy.
- HR3** Females of childbearing age lacking evidence of immunity.
- HR4** Persons who engage in sex with multiple partners in areas in which syphilis is prevalent, prostitutes, or contacts of persons with active syphilis.
- HR5** Persons who attend clinics for sexually transmitted diseases; attend other high-risk health care facilities (e.g., adolescent and family planning clinics); or have other risk factors for chlamydial infection (e.g., multiple sexual partners or a sexual partner with multiple sexual contacts).
- HR6** Persons with multiple sexual partners or a sexual partner with multiple contacts, sexual contacts of persons with culture-proven gonorrhea, or persons with a history of repeated episodes of gonorrhea.
- HR7** Persons seeking treatment for sexually transmitted diseases; homosexual and bisexual men; past or present intravenous (IV) drug users; persons with a history of prostitution or multiple sexual partners; women whose past or present

- sexual partners were HIV-infected, bisexual, or IV drug users; persons with long-term residence or birth in an area with high prevalence of HIV infection; or persons with a history of transfusion between 1978 and 1985.
- HR8** Household members of persons with tuberculosis or others at risk for close contact with the disease; recent immigrants or refugees from countries in which tuberculosis is common (e.g., Asia, Africa, Central and South America, Pacific Islands); migrant workers; residents of correctional institutions or homeless shelters; or persons with certain underlying medical disorders.
- HR9** Persons exposed regularly to excessive noise in recreational or other settings.
- HR10** Females who are sexually active or (if the sexual history is thought to be unreliable) aged 18 or older.
- HR11** Recent divorce, separation, unemployment, depression, alcohol or other drug abuse, serious medical illnesses, living alone, or recent bereavement.
- HR12** Intravenous drug users.
- HR13** Persons of Caribbean, Latin American, Asian, Mediterranean, or African descent.
- HR14** Persons with increased exposure to sunlight.
- HR15** Persons living in areas with inadequate water fluoridation (less than 0.7 parts per million).

**Table 5.**  
**Ages 19–39**  
**Schedule: Every 1–3 Years\***

**Leading Causes of Death:**  
Motor vehicle crashes  
Homicide  
Suicide  
Injuries (nonmotor vehicle)  
Heart disease

SCREENING	COUNSELING	IMMUNIZATIONS
<b>History</b> Dietary intake Physical activity Tobacco/alcohol/drug use Sexual practices  <b>Physical Exam</b> Height and weight Blood pressure <i>HIGH-RISK GROUPS</i> Complete oral cavity exam (HR1) Palpation for thyroid nodules (HR2) Clinical breast exam (HR3) Clinical testicular exam (HR4) Complete skin exam (HR5)  <b>Laboratory/Diagnostic Procedures</b> Nonfasting total blood cholesterol Papanicolaou smear <sup>1</sup> <i>HIGH-RISK GROUPS</i> Fasting plasma glucose (HR6) Rubella antibodies (HR7) VDRL/RPR (HR8) Urinalysis for bacteriuria (HR9) Chlamydial testing (HR10) Gonorrhea culture (HR11) Counseling and testing for HIV (HR12) Hearing (HR13) Tuberculin skin test (PPD) (HR14) Electrocardiogram (HR15) Mammogram (HR3) Colonoscopy (HR16)	<b>Diet and Exercise</b> Fat (especially saturated fat), cholesterol, complex carbohydrates, fiber, sodium, iron <sup>2</sup> , calcium <sup>2</sup> Caloric balance Selection of exercise program  <b>Substance Use</b> Tobacco: cessation/primary prevention Alcohol and other drugs: Limiting alcohol consumption Driving/other dangerous activities while under the influence Treatment for abuse <i>HIGH-RISK GROUPS</i> Sharing/using unsterilized needles and syringes (HR18)  <b>Sexual Practices</b> Sexually transmitted diseases: partner selection, condoms, anal intercourse Unintended pregnancy and contraceptive options  <b>Injury Prevention</b> Safety belts Safety helmets Violent behavior <sup>3</sup> Firearms <sup>3</sup> Smoke detector Smoking near bedding or upholstery <i>HIGH-RISK GROUPS</i> Back-conditioning exercises (HR19) Prevention of childhood injuries (HR20) Falls in the elderly (HR21)  <b>Dental Health</b> Regular tooth brushing, flossing, dental visits  <b>Other Primary Preventive Measures</b> <i>HIGH-RISK GROUPS</i> Discussion of hemoglobin testing (HR22) Skin protection from ultraviolet light (HR23)	<b>Tetanus-diphtheria (Td) booster*</b> <i>HIGH-RISK GROUPS</i> Hepatitis B vaccine (HR24) Pneumococcal vaccine (HR25) Influenza vaccine <sup>4</sup> (HR26) Measles-mumps-rubella vaccine (HR27)  <b>This list of preventive services is not exhaustive.</b> It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include: Chronic obstructive pulmonary disease Hepatobiliary disease Bladder cancer Endometrial disease Travel-related illness Prescription drug abuse Occupational illness and injuries  <b>Remain Alert For:</b> Depressive symptoms Suicide risk factors (HR17) Abnormal bereavement Malignant skin lesions Tooth decay, gingivitis Signs of physical abuse

\*The recommended schedule applies only to the periodic visit itself. The frequency of the individual preventive services listed in this table is left to clinical discretion, except as indicated in other footnotes.

1. Every 1–3 years. 2. For women. 3. Especially for young males. 4. Every 10 years. 5. Annually.

**Table 5. Ages 19–39**

**High-Risk Categories**

- HR1 Persons with exposure to tobacco or excessive amounts of alcohol, or those with suspicious symptoms or lesions detected through self-examination.
- HR2 Persons with a history of upper-body irradiation.
- HR3 Women aged 35 and older with a family history of premenopausally diagnosed breast cancer in a first-degree relative.
- HR4 Men with a history of cryptorchidism, orchiopexy, or testicular atrophy.
- HR5 Persons with family or personal history of skin cancer, increased occupational or recreational exposure to sunlight, or clinical evidence of precursor lesions (e.g., dysplastic nevi, certain congenital nevi).
- HR6 The markedly obese, persons with a family history of diabetes, or women with a history of gestational diabetes.
- HR7 Women lacking evidence of immunity.
- HR8 Prostitutes, persons who engage in sex with multiple partners in areas in which syphilis is prevalent, or contacts of persons with active syphilis.
- HR9 Persons with diabetes.
- HR10 Persons who attend clinics for sexually transmitted diseases; attend other high-risk health care facilities (e.g., adolescent and family planning clinics); or have other risk factors for chlamydial infection (e.g., multiple sexual partners or a sexual partner with multiple sexual contacts, age less than 20).
- HR11 Prostitutes, persons with multiple sexual partners or a sexual partner with multiple contacts, sexual contacts of persons with culture-proven gonorrhea, or persons with a history of repeated episodes of gonorrhea.
- HR12 Persons seeking treatment for sexually transmitted diseases; homosexual and bisexual men; past or present intravenous (IV) drug users; persons with a history of prostitution or multiple sexual partners; women whose past or present sexual partners were HIV-infected, bisexual, or IV drug users; persons with long-term residence or birth in an area with high prevalence of HIV infection; or persons with a history of transfusion between 1978 and 1985.
- HR13 Persons exposed regularly to excessive noise.
- HR14 Household members of persons with tuberculosis or others at risk for close contact with the disease (e.g., staff of tuberculosis clinics; shelters for the homeless, nursing homes, substance abuse treatment facilities, dialysis units, correctional institutions); recent immigrants or refugees from countries in which tuberculosis is common; migrant workers; residents of nursing homes, correctional institutions, or homeless shelters; or persons with certain underlying medical disorders (e.g., HIV infection).
- HR15 Men who would endanger public safety were they to experience sudden cardiac events (e.g., commercial airline pilots).
- HR16 Persons with a family history of familial polypoidosis coli or cancer family syndrome.
- HR17 Recent divorce, separation, unemployment, depression, alcohol or other drug abuse, serious medical illnesses, living alone, or recent bereavement.
- HR18 Intravenous drug users.
- HR19 Persons at increased risk for low back injury because of past history, body configuration, or type of activities.
- HR20 Persons with children in the home or automobile.
- HR21 Persons with older adults in the home.
- HR22 Young adults of Caribbean, Latin American, Asian, Mediterranean, or African descent.
- HR23 Persons with increased exposure to sunlight.
- HR24 Homosexually active men, intravenous drug users, recipients of some blood products, or persons in health-related jobs with frequent exposure to blood or blood products.
- HR25 Persons with medical conditions that increase the risk of pneumococcal infection (e.g., chronic cardiac or pulmonary disease, sickle cell disease, nephrotic syndrome, Hodgkin's disease, asplenia, diabetes mellitus, alcoholism, cirrhosis, multiple myeloma, renal disease, or conditions associated with immunosuppression).
- HR26 Residents of chronic care facilities or persons suffering from chronic cardiopulmonary disorders, metabolic diseases (including diabetes mellitus), hemoglobinopathies, immunosuppression, or renal dysfunction.
- HR27 Persons born after 1956 who lack evidence of immunity to measles (receipt of live vaccine on or after first birthday, laboratory evidence of immunity, or a history of physician-diagnosed measles).

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**Table 6.**  
**Ages 40–64**  
**Schedule: Every 1–3 Years\***

**Leading Causes of Death:**  
Heart disease  
Lung cancer  
Cerebrovascular disease  
Breast cancer  
Colorectal cancer  
Obstructive lung disease

SCREENING	COUNSELING	IMMUNIZATIONS
<b>History</b> Dietary intake Physical activity Tobacco/alcohol/drug use Sexual practices  <b>Physical Exam</b> Height and weight Blood pressure Clinical breast exam <sup>1</sup> <b>HIGH-RISK GROUPS</b> Complete skin exam (HR1) Complete oral cavity exam (HR2) Palpation for thyroid nodules (HR3) Auscultation for carotid bruits (HR4)  <b>Laboratory/Diagnostic Procedures</b> Nonfasting total blood cholesterol Papanicolaou smear <sup>2</sup> Mammogram <sup>3</sup> <b>HIGH-RISK GROUPS</b> Fasting plasma glucose (HR5) VDRL/RPR (HR6) Urinalysis for bacteriuria (HR7) Chlamydia testing (HR8) Gonorrhea culture (HR9) Counseling and testing for HIV (HR10) Tuberculin skin test (PPD) (HR11) Hearing (HR12) Electrocardiogram (HR13) Fecal occult blood/sigmoidoscopy (HR14) Fecal occult blood/colonoscopy (HR15) Bone mineral content (HR16)	<b>Diet and Exercise</b> Fat (especially saturated fat), cholesterol, complex carbohydrates, fiber, sodium, calcium <sup>4</sup> Caloric balance Selection of exercise program  <b>Substance Use</b> Tobacco cessation Alcohol and other drugs: Limiting alcohol consumption Driving/other dangerous activities while under the influence Treatment for abuse <b>HIGH-RISK GROUPS</b> Sharing/using unsterilized needles and syringes (HR19)  <b>Sexual Practices</b> Sexually transmitted diseases; partner selection, condoms, anal intercourse Unintended pregnancy and contraceptive options  <b>Injury Prevention</b> Safety belts Safety helmets Smoke detector Smoking near bedding or upholstery <b>HIGH-RISK GROUPS</b> Back-conditioning exercises (HR20) Prevention of childhood injuries (HR21) Falls in the elderly (HR22)  <b>Dental Health</b> Regular tooth brushing, flossing, and dental visits  <b>Other Primary Preventive Measures</b> <b>HIGH-RISK GROUPS</b> Skin protection from ultraviolet light (HR23) Discussion of aspirin therapy (HR24) Discussion of estrogen replacement therapy (HR25)	<b>Tetanus-diphtheria (Td) booster<sup>5</sup></b> <b>HIGH-RISK GROUPS</b> Hepatitis B vaccine (HR26) Pneumococcal vaccine (HR27) Influenza vaccine (HR28) <sup>6</sup>  <b>This list of preventive services is not exhaustive.</b> It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include: Chronic obstructive pulmonary disease Hepatobiliary disease Bladder cancer Endometrial disease Travel-related illness Prescription drug abuse Occupational illness and injuries  <b>Remain Alert For:</b> Depressive symptoms Suicide risk factors (HR17) Abnormal bereavement Signs of physical abuse or neglect Malignant skin lesions Peripheral arterial disease (HR18) Tooth decay, gingivitis, loose teeth

\*The recommended schedule applies only to the periodic visit itself. The frequency of the individual preventive services listed in this table is left to clinical discretion, except as indicated in other footnotes.

1. Annually for women. 2. Every 1–3 years for women. 3. Every 1–2 years for women beginning at age 50 (age 35 for those at increased risk). 4. For women. 5. Every 10 years. 6. Annually.

**Table 6. Ages 40–64**

**High-Risk Categories**

- HR1** Persons with a family of personal history of skin cancer, increased occupational or recreational exposure to sunlight, or clinical evidence of precursor lesions (e.g., dysplastic nevi, certain congenital nevi).
- HR2** Persons with exposure to tobacco or excessive amounts of alcohol, or those with suspicious symptoms or lesions detected through self-examination.
- HR3** Persons with a history of upper-body irradiation.
- HR4** Persons with risk factors for cerebrovascular or cardiovascular disease (e.g., hypertension, smoking, CAD, atrial fibrillation, diabetes) or those with neurologic symptoms (e.g., transient ischemic attacks) or a history of cerebrovascular disease.
- HR5** The markedly obese, persons with a family history of diabetes, or women with a history of gestational diabetes.
- HR6** Prostitutes, persons who engage in sex with multiple partners in areas in which syphilis is prevalent, or contacts of persons with active syphilis.
- HR7** Persons with diabetes.
- HR8** Persons who attend clinics for sexually transmitted diseases, attend other high-risk health care facilities (e.g., adolescent and family planning clinics), or have other risk factors for chlamydia infection (e.g., multiple sexual partners or a sexual partner with multiple sexual contacts).
- HR9** Prostitutes, persons with multiple sexual partners or a sexual partner with multiple contacts, sexual contacts of persons with culture-proven gonorrhea, or persons with a history of repeated episodes of gonorrhea.
- HR10** Persons seeking treatment for sexually transmitted diseases; homosexual and bisexual men; past or present intravenous (IV) drug users; persons with a history of prostitution or multiple sexual partners; women whose past or present sexual partners were HIV-infected, bisexual, or IV drug users; persons with long-term residence or birth in an area with high prevalence of HIV infection; or persons with a history of transfusion between 1978 and 1985.
- HR11** Household members of persons with tuberculosis or others at risk for close contact with the disease (e.g., staff of tuberculosis clinics, shelters for the homeless, nursing homes, substance abuse treatment facilities, dialysis units, correctional institutions); recent immigrants or refugees from countries in which tuberculosis is common (e.g., Asia, Africa, Central and South America, Pacific Islands); migrant workers; residents of nursing homes, correctional institutions, or homeless shelters; or persons with certain underlying medical disorders (e.g., HIV infection).
- HR12** Persons exposed regularly to excessive noise.
- HR13** Men with two or more cardiac risk factors (high blood cholesterol, hypertension, cigarette smoking, diabetes mellitus, family history of CAD);

- men who would endanger public safety were they to experience sudden cardiac events (e.g., commercial airline pilots); or sedentary or high-risk males planning to begin a vigorous exercise program.
- HR14** Persons aged 50 and older who have first-degree relatives with colorectal cancer; a personal history of endometrial, ovarian, or breast cancer; or a previous diagnosis of inflammatory bowel disease, adenomatous polyps, or colorectal cancer.
- HR15** Persons with a family history of familial polyposis coli or cancer family syndrome.
- HR16** Perimenopausal women at increased risk for osteoporosis (e.g., Caucasian race, bilateral oophorectomy before menopause, slender build) and for whom estrogen replacement therapy would otherwise not be recommended.
- HR17** Recent divorce, separation, unemployment, depression, alcohol or other drug abuse, serious medical illnesses, living alone, or recent bereavement.
- HR18** Persons over age 50, smokers, or persons with diabetes mellitus.
- HR19** Intravenous drug users.
- HR20** Persons at increased risk for low back injury because of past history, body configuration, or type of activities.
- HR21** Persons with children in the home or automobile.
- HR22** Persons with older adults in the home.
- HR23** Persons with increased exposure to sunlight.
- HR24** Men who have risk factors for myocardial infarction (e.g., high blood cholesterol, smoking, diabetes mellitus, family history of early-onset CAD) and who lack a history of gastrointestinal or other bleeding problems, and other risk factors for bleeding or cerebral hemorrhage.
- HR25** Perimenopausal women at increased risk for osteoporosis (e.g., Caucasian, low bone mineral content, bilateral oophorectomy before menopause or early menopause, slender build) and who are without known contraindications (e.g., history of undiagnosed vaginal bleeding, active liver disease, thromboembolic disorders, hormone-dependent cancer).
- HR26** Homosexually active men, intravenous drug users, recipients of some blood products, or persons in health-related jobs with frequent exposure to blood or blood products.
- HR27** Persons with medical conditions that increase the risk of pneumococcal infection (e.g., chronic cardiac or pulmonary disease, sickle cell disease, nephrotic syndrome, Hodgkin's disease, asplenia, diabetes mellitus, alcoholism, cirrhosis, multiple myeloma, renal disease or conditions associated with immunosuppression).
- HR28** Residents of chronic care facilities and persons suffering from chronic cardiopulmonary disorders, metabolic diseases (including diabetes mellitus), hemoglobinopathies, immunosuppression, or renal dysfunction.

**Table 7.**  
**Ages 65 and Over**  
**Schedule: Every Year\***

**Leading Causes of Death:**  
Heart disease  
Cerebrovascular disease  
Obstructive lung disease  
Pneumonia/influenza  
Lung cancer  
Colorectal cancer

SCREENING	COUNSELING	IMMUNIZATIONS
<b>History</b> Prior symptoms of transient ischemic attack Dietary intake Physical activity Tobacco/alcohol/drug use Functional status at home  <b>Physical Exam</b> Height and weight Blood pressure Visual acuity Hearing and hearing aids Clinical breast exam <sup>1</sup> <b>HIGH-RISK GROUPS</b> Auscultation for carotid bruits (HR1) Complete skin exam (HR2) Complete oral cavity exam (HR3) Palpation of thyroid nodules (HR4)  <b>Laboratory/Diagnostic Procedures</b> Nonfasting total blood cholesterol Dipstick urinalysis Mammogram <sup>2</sup> Thyroid function tests <sup>3</sup> <b>HIGH-RISK GROUPS</b> Fasting plasma glucose (HR5) Tuberculin skin test (PPD) (HR6) Electrocardiogram (HR7) Papanicolaou smear <sup>4</sup> (HR8) Fecal occult blood/Sigmoidoscopy (HR9) Fecal occult blood/Colonoscopy (HR10)	<b>Diet and Exercise</b> Fat (especially saturated fat), cholesterol, complex carbohydrates, fiber, sodium, calcium <sup>5</sup> Caloric balance Selection of exercise program  <b>Substance Use</b> Tobacco cessation Alcohol and other drugs: Limiting alcohol consumption Driving/other dangerous activities while under the influence Treatment for abuse  <b>Injury Prevention</b> Prevention of falls Safety belts Smoke detector Smoking near bedding or upholstery Hot water heater temperature Safety helmets <b>HIGH-RISK GROUPS</b> Prevention of childhood injuries. (HR12)  <b>Dental Health</b> Regular dental visits, tooth brushing, flossing  <b>Other Primary Preventive Measures</b> Glaucoma testing by eye specialist <b>HIGH-RISK GROUPS</b> Discussion of estrogen replacement therapy (HR13) Discussion of aspirin therapy (HR14) Skin protection from ultraviolet light (HR15)	Tetanus-diphtheria (Td) booster <sup>5</sup> Influenza vaccine <sup>1</sup> Pneumococcal vaccine <b>HIGH-RISK GROUPS</b> Hepatitis B vaccine (HR16)  <b>This list of preventive services is not exhaustive.</b> It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include: Chronic obstructive pulmonary disease Hepatobiliary disease Bladder cancer Endometrial disease Travel-related illness Prescription drug abuse Occupational illness and injuries  <b>Remain Alert For:</b> Depression symptoms Suicide risk factors (HR11) Abnormal bereavement Changes in cognitive function Medications that increase risk of falls Signs of physical abuse or neglect Malignant skin lesions Peripheral arterial disease Tooth decay, gingivitis, loose teeth

\*The recommended schedule applies only to the periodic visit itself. The frequency of the individual preventive services listed in this table is left to clinical discretion, except as indicated in other footnotes.

1. Annually. 2. Every 1-2 years for women until age 75, unless pathology detected. 3. For women. 4. Every 1-3 years. 5. Every 10 years.

**Table 7. Ages 65 and Over**

**High-Risk Categories**

**HR1** Persons with risk factors for cerebrovascular or cardiovascular disease (e.g., hypertension, smoking, CAD, atrial fibrillation, diabetes) or those with neurologic symptoms (e.g., transient ischemic attacks) or a history of cerebrovascular disease.

**HR2** Persons with a family or personal history of skin cancer, or clinical evidence of precursor lesions (e.g., dysplastic nevi, certain congenital nevi), or those with increased occupational or recreational exposure to sunlight.

**HR3** Persons with exposure to tobacco or excessive amounts of alcohol, or those with suspicious symptoms or lesions detected through self-examination.

**HR4** Persons with a history of upper-body irradiation.

**HR5** The markedly obese, persons with a family history of diabetes, or women with a history of gestational diabetes.

**HR6** Household members of persons with tuberculosis or others at risk for close contact with the disease (e.g., staff of tuberculosis clinics, shelters for the homeless, nursing homes, substance abuse treatment facilities, dialysis units, correctional institutions); recent immigrants or refugees from countries in which tuberculosis is common (e.g., Asia, Africa, Central and South America, Pacific Islands); migrant workers; residents of nursing homes, correctional institutions, or homeless shelters; or persons with certain underlying medical disorders (e.g., HIV infection).

**HR7** Men with two or more cardiac risk factors (high blood cholesterol, hypertension, cigarette smoking, diabetes mellitus, family history of CAD); men who would endanger public safety were they to experience sudden cardiac events (e.g., commercial airline pilots); or sedentary or high-risk

males planning to begin a vigorous exercise program.

**HR8** Women who have not had previous documented screening in which smears have been consistently negative.

**HR9** Persons who have first-degree relatives with colorectal cancer; a personal history of endometrial, ovarian, or breast cancer; or a previous diagnosis of inflammatory bowel disease, adenomatous polyps, or colorectal cancer.

**HR10** Persons with a family history of familial polyposis coli or cancer family syndrome.

**HR11** Recent divorce, separation, unemployment, depression, alcohol or other drug abuse, serious medical illnesses, living alone, or recent bereavement.

**HR12** Persons with children in the home or automobile.

**HR13** Women at increased risk for osteoporosis (e.g., Caucasian, low bone mineral content, bilateral oophorectomy before menopause or early menopause, slender build) and who are without known contraindications (e.g., history of undiagnosed vaginal bleeding, active liver disease, thromboembolic disorders, hormone-dependent cancer).

**HR14** Men who have risk factors for myocardial infarction (e.g., high blood cholesterol, smoking, diabetes mellitus, family history of early-onset CAD) and who lack a history of gastrointestinal or other bleeding problems, or other risk factors for bleeding or cerebral hemorrhage.

**HR15** Persons with increased exposure to sunlight.

**HR16** Homosexually active men, intravenous drug users, recipients of some blood products, or persons in health-related jobs with frequent exposure to blood or blood products.

**Table 8.  
Pregnant Women<sup>1</sup>**

FIRST PRENATAL VISIT		
<b>SCREENING</b>  <b>History</b> Genetic and obstetric history Dietary intake Tobacco/alcohol/drug use Risk factors for intrauterine growth retardation and low birthweight Prior genital herpetic lesions  <b>Laboratory/Diagnostic Procedures</b> Blood pressure Hemoglobin and hematocrit ABO/Rh typing Rh(D) and other antibody screen VDRL/RPR Hepatitis B surface antigen (HBsAg) Urinalysis for bacteriuria Gonorrhea culture <b>HIGH-RISK GROUPS</b> Hemoglobin electrophoresis (HR1) Rubella antibodies (HR2) Chlamydial testing (HR3) Counseling and testing for HIV (HR4)	<b>COUNSELING</b>  Nutrition Tobacco use Alcohol and other drug use Safety belts <b>HIGH-RISK GROUPS</b> Discuss amniocentesis (HR5) Discuss risks of HIV infection (HR4)	This list of preventive services is not exhaustive. It reflects only those topics reviewed by the U.S. Preventive Services Task Force. Clinicians may wish to add other preventive services on a routine basis, and after considering the patient's medical history and other individual circumstances. Examples of target conditions not specifically examined by the Task Force include:  Counseling on warning signs and symptoms Physical findings of abdominal and cervical examination Tay-Sachs disease Childbirth education Teratogenic and fetotoxic exposures
	<b>Remain Alert For:</b> Signs of physical abuse	
<b>FOLLOW-UP VISITS</b> Schedule: See Footnote <sup>a</sup>		
1. See also Tables 4-6 for other preventive services for women. 2. Women with access to counseling and follow-up services, skilled high-resolution ultrasound and amniocentesis capabilities, and reliable, standardized laboratories.	<b>SCREENING</b>  Blood pressure Urinalysis for bacteriuria  <b>Screening Tests at Specific Gestational Ages</b>  <b>14-16 Weeks:</b> Maternal serum alpha-fetoprotein (MSAFP) <sup>2</sup> Ultrasound cephalometry (HR8)  <b>24-28 Weeks:</b> 50 g oral glucose tolerance test Rh(D) antibody (HR9) Gonorrhea culture (HR10) VDRL/RPR (HR11) Hepatitis B surface antigen (HBsAg) (HR12) Counseling and testing for HIV (HR13)  <b>36 Weeks:</b> Ultrasound exam (HR14)	<b>COUNSELING</b>  Nutrition Safety belts Discuss meaning of upcoming tests <b>HIGH-RISK GROUPS</b> Tobacco use (HR6) Alcohol and other drug use (HR7)
	<b>Remain Alert For:</b> Signs of physical abuse	
<sup>a</sup> Because of lack of data and differing patient risk profiles, the scheduling of visits and the frequency of the individual preventive services listed in this table are left to clinical discretion, except for those indicated at specific gestational ages.		

**Table 8. Pregnant Women**

**High-Risk Categories**

- HR1 Black women.  
 HR2 Women lacking evidence of immunity (proof of vaccination after the first birthday or laboratory evidence of immunity.)  
 HR3 Women who attend clinics for sexually transmitted diseases, attend other high-risk health care facilities (e.g., adolescent and family planning clinics), or have other risk factors for chlamydial infection (e.g., multiple sexual partners or a sexual partner with multiple sexual contacts).  
 HR4 Women seeking treatment for sexually transmitted diseases; past or present intravenous (IV) drug users; women with a history of prostitution or multiple sexual partners; women whose past or present sexual partners were HIV-infected, bisexual, or IV drug users; women with long-term residence or birth in an area with high prevalence of HIV infection in women; or women with a history of transfusion between 1978 and 1985.  
 HR5 Women aged 35 and older.  
 HR6 Women who continue to smoke during pregnancy.  
 HR7 Women with excessive alcohol consumption during pregnancy.  
 HR8 Women with uncertain menstrual histories or risk factors for intrauterine growth retardation (e.g., hypertension, renal disease, short maternal stature, low prepregnancy weight, failure to gain weight during pregnancy, smoking, alcohol and other drug abuse, and history of a previous fetal death or growth-retarded baby).  
 HR9 Unsensitized Rh-negative women.  
 HR10 Women with multiple sexual partners or a sexual partner with multiple contacts, or sexual contacts of persons with culture-proven gonorrhea.  
 HR11 Women who engage in sex with multiple partners in areas in which syphilis is prevalent, or contacts of persons with active syphilis.  
 HR12 Women who engage in high-risk behavior (e.g., intravenous drug use) or in whom exposure to hepatitis B during pregnancy is suspected.  
 HR13 Women at high risk (see HR4) who have a nonreactive HIV test at the first prenatal visit.  
 HR14 Women with risk factors for intrauterine growth retardation (see HR8).

SCREENING: AGE 65 and OLDER					NAME										Chart #											
DATE																										
AGE	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85+
<b>HISTORY</b>																										
Complete H. & P.	once at entry																									
Functional Status 1																										
Dietary Intake 2																										
Physical Activity 3																										
Tobacco/ Alcohol 4																										
Medications 5																										
Prior Directives 6																										
<b>PHYSICAL EXAM</b>																										
Height																										
Weight																										
Blood Pressure																										
Visual Acuity																										
Audiometry 7																										
Clinical Breast Exam																										
Mini-Mental State Exam 8																										
Falls Risk Assessment 9																										
<b>LABORATORY</b>																										
Nonfasting Cholesterol 10																										
Mammography 11																										
Pap Test 12																										

1. ADL's, IADL's and Mobility, (see Form A). 2. Fat, fiber, calories, protein and calcium. 3. Aerobic (pulse =  $0.6 - 0.7[220 - \text{age}]$ , 20-30 min., 3 times/wk.), and range of motion exercises. 4. CAGE (cut down, annoyed, guilty, eyeopener). 5. Prescription medications (especially anxiolytics, and sedative/hypnotics), OTC medications and borrowed medications. 6. Durable Power of Attorney or Living Will depending on local statute. 7. Hand held or desk top audiometry with a threshold of 40 db. 8. Folstein Mini-Mental State Exam (see Form B). 9. Get-Up and Go test (patient is observed as he rises from an arm chair, walks 3 meters and returns to the chair). 10. Perform 70-75 only if patient is independent in IADL's and has no major illness. 11. Continue to age 85 if the patient has no major illness and is independent in IADL's. 12. Stop at age 65 if patient has at least three documented recent normal tests (endocervical cells present) and no previous cervical dysplasia.

## Form A

# GERIATRIC SCREENING FORM

(Instructions)

ADL/IADL

Independence means without supervision, direction, or active personal assistance, except as specifically noted below. This is based on actual status and not on ability. A patient who refused to perform a function is considered as not performing the function, even though he is deemed able.

INDEPENDENCEBathing—(sponge, shower, tub)

assistance only in bathing a single part (e.g., back) or bathes self completely; otherwise dependent.

Dressing

gets clothes from closets and drawers; puts on clothes, outer garments, braces; manages fasteners; act of tying shoes is excluded; otherwise dependent.

Toileting

gets to toilet, gets on and off toilet; arranges clothes, cleans organs of excretion; (may manage own bed pan used at night only and may or may not be using mechanical support); otherwise dependent.

Transfer

moves in and out of bed independently and moves in and out of chair independently (may or may not be using mechanical supports); otherwise dependent.

Continence

urination and defecation entirely self controlled; otherwise dependent.

Feeding

gets food from plate or its equivalent into mouth (precutting of meat and preparation of food, as buttering bread, are excluded from evaluation); otherwise dependent.

## Form B

MINI-MENTAL STATE EXAMOrientation

1. Ask for the date. Then ask specifically for parts omitted, e.g., "Can you also tell me what season it is?"
2. Ask in turn "Can you tell me the name of this hospital?" (town, country, etc.)

Registration

3. Say the names of 3 unrelated objects, clearly and slowly, about one second for each. After you have said all 3, ask him to repeat them. This first repetition determines his score (0-3).

Attention and Calculation

4. Ask the patient to begin with 100 and count backwards by 7. Stop after 5 subtractions (93, 86, 79, 72, 65). If the patient cannot or will not perform this task, ask him to spell the word "world" backwards.

Recall

5. Ask the patient if he can recall the 3 words you previously asked him to remember.

Language

6. *Naming*: Show the patient a wrist watch and ask him what it is. Repeat for pencil.
7. *Repetition*: Ask the patient to repeat the sentence after you. Allow only one trial.
8. *3-Stage command*: Give the patient a piece of plain blank paper and repeat the command.
9. *Reading*: On a blank piece of paper, print the sentence "Close your eyes" in letters large enough for the patient to see clearly. Ask him to read it and do what it says. Score 1 point only if he actually closes his eyes.
10. *Writing*: Give the patient a blank piece of paper and ask him to write a sentence for you. Do not dictate a sentence, it is to be written spontaneously. It must contain a subject and verb and be sensible. Correct grammar and punctuation are not necessary.
11. *Copying*: On a clean piece of paper, draw intersecting pentagons, each side about 1 in., and ask him to copy it exactly as it is. All 10 angles must be present and 2 must intersect to score 1 point.

(continued...)

**Geriatric Screening Form** (Instructions on reverse side)

(Name) \_\_\_\_\_

Functional Status: For each ADL/IADL mark either I or D. (Independent or Dependent)

Date

Activities of Daily Living

bathing  
dressing  
toileting  
transferring  
feeding  
continence - bladder  
                  - bowell

/ /	/ /	/ /	/ /	/ /	/ /

Instrumental Activities of Daily Living (IADL)

shopping  
transportation  
do laundry  
do light housework  
prepare light meal  
manage finances  
use telephone  
take medications


Mobility (Mark I, A, P or D:

I=Independent A=Assistance Device  
P=Personal Assistance D=Dependent)

Walks

Wheelchair (if applicable)


Mini-Mental State Examination

1. What is the \_\_\_\_\_? (one point each) (year/season/date/day/month)
2. Where are we? (one point each) (state/country/town/hospital/floor)
3. Name three objects (one point each)
4. Serial 7's (1 point for each correct: total 5)
5. Recall 3 objects (1 point each)
6. Name a pencil and watch (1 point each)
7. Repeat "no ifs, ands or buts" (1 point)
8. Follow a 3-step command (1 point for each step)
9. Read the following: CLOSE YOUR EYES (1 point)
10. Write a sentence (1 point)
11. Copy design (1 point)


Mini-Mental State Total Score:

30      30      30      30      30      30

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